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HOLLAND COUNTY COUNCIL
LINCOLNSHIRE

Annual Report
ON THE
County Health Services

PART 2

Report

OF THE

Medical Officer of Health

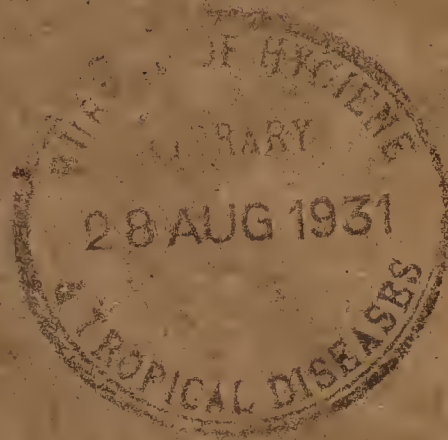
BY

H. C. JENNINGS,

M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

1930.

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**To the Chairman and Members of the Public Health and
Housing Committee and the Maternity and Child Welfare
Committee.**

Ladies and Gentlemen,

I have the honour to submit my Annual Report on the Public Health of the County of Holland. This Report which is a survey one, follows as closely as possible Circular 1119 of the Ministry and whilst containing much information already known to members of the Council, is a record of progress which should prove of interest to everyone.

As a result of the coming into force on April 1st, 1930, of the Local Government Act, 1929, much extra work and responsibility has been thrown upon the Health Department, as will be seen from the body of the Report. The Council now has the opportunity of formulating plans for the co-ordination of all its medical services, and the success of the work of the future will largely depend upon whether the problems of the present are dealt with from a broad County point of view or not.

The preliminary figures of the Census 1931 show that the population of the County has increased by 6,443 since 1921.

The death rate for the County was 11.2, the birth rate 19.5, and the infant mortality rate 58.

I should like to place on record my appreciation of the work of the whole staff of the Department during a year of rapid extension of activities and responsibilities.

I am,

Ladies and Gentlemen,

Your obedient Servant,

H. C. JENNINGS.

*County Hall, Boston,
July, 1931.*

PUBLIC HEALTH AND HOUSING COMMITTEE.

Coun. S. Wain (Chairman).

Ald. A. E. Banks, J.P.	Coun. B. Killingworth.
Ald. T. W. Banks, J.P.	Coun. R. Leggott.
Ald. R. Coupland.	Coun. Mrs. L. Mawer.
Ald. R. Gleed, D.L., J.P.	Coun. J. S. Patchett.
Ald. T. Kitwood, J.P.	Coun. C. I. Patchett.
Ald. R. Riddington.	Coun. W. E. Pearson.
Coun. W. A. Atton.	Coun. G. Parker.
Coun. C. Casswell.	Coun. A. C. Rysdale.
Coun. F. Dring.	Coun. R. Salter, J.P.
Coun. R. M. Fletcher.	Coun. E. I. R. Stapleton.
Coun. R. W. B. Gleed.	Coun. J. Walton.
Coun. T. Grant.	Coun. T. Warrick.
Coun. A. de B. Johnson.	

SANATORIUM SUB-COMMITTEE.

Coun. Mrs. L. Mawer (Chairman).

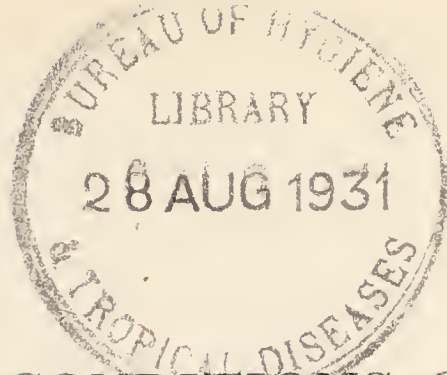
Coun. W. A. Atton.	Coun. E. I. R. Stapleton.
Coun. R. Salter, J.P.	Coun. S. Wain.

MATERNITY AND CHILD WELFARE COMMITTEE.

Coun. S. Wain (Chairman).

Ald. T. W. Banks, J.P.	Coun. T. W. Mews.
Ald. R. Coupland.	Coun. J. H. Mountain.
Ald. R. Gleed, D.L., J.P.	Coun. J. S. Patchett.
Ald. R. Riddington.	Coun. G. Parker.
Coun. C. Casswell.	Coun. A. C. Rysdale.
Coun. F. Dring.	Coun. R. Salter, J.P.
Coun. R. M. Fletcher.	Coun. E. I. R. Stapleton.
Coun. Mrs. L. Mawer.	

with Mrs. R. Coupland, Miss E. M. Maples, and Mrs. Nicholas.



STATISTICS AND SOCIAL CONDITIONS OF AREA.

(a) GENERAL STATISTICS.

Area (acres)	268,992
Population (Census 1921)	85,870
Population (Estimated mid-1930)	90,950
Number of inhabited houses (1921)	20,079
*Number of inhabited houses (end of 1930)	
Number of families or separate occupiers (1921)	20,434
Average number of persons per 100 acres (1930) .....	.37
Rateable value for whole County before derating	£455,515
after derating	£300,434
Produce of penny rate for whole County—	
Before derating.....	£1,759
After derating	£1,165

On the 31st March, 1930, that portion of the Parish of Deeping St. Nicholas hitherto in the Parts of Kesteven was transferred to the County of Holland.

The average number of persons per 100 acres is 37, and of this number less than 50 per cent. are living under strictly urban conditions, the greater portion of the population being distributed over a wide area. The inhabitants of the County are almost entirely engaged in agriculture or in trades in connection therewith. Fruit is produced in large quantities in the south-east of the County, and the bulb industry flourishes around Spalding. Fruit and vegetable canning is developing both in Boston and Spalding.

Seasonal employment is given to a large number of persons at the Beet Sugar Factory at Spalding.

At the Port of Boston the chief export is coal, and the most important imports are wood and fruit (chiefly oranges).

Generally speaking, one may say that the conditions of life in the County are favourable to the maintenance of good health, although overcrowding is still found in the towns and to some extent the countryside.

* These figures do not appear in all Reports from Local Sanitary Authorities so that total cannot be given.

(b) EXTRACTS FROM VITAL STATISTICS FOR THE YEAR.

The estimated population to the middle of 1930 was 90,950, and the census figures for 1931 (April) were 92,313. I have therefore based the following statistics on the former figure.

The preliminary Census figures show that in the County the population has risen from 85,870 in 1921 to 92,313 in 1931, an increase of 6,443. This is a percentage increase of 7.5.

All the County Districts with the exception of Long Sutton show increases, the decrease in Long Sutton being 290 (9.1%).

The highest percentage increases are those for Sutton Bridge and Spalding Urban which were 21% and 17.6% respectively.

There are 1,014 females to every 1,000 males in the County, the figure for England and Wales being 1,087. This County is amongst those showing the lowest proportion of females to males in the country.

Live births	{				}	Birth rate 19.5
			M.	F.		
			Total			
		Legitimate	850	834	1684	
		Illegitimate	48	39	87	

Still births—78. Rate per 1,000 total births—44.

Deaths—1,023. Death rate 11.2.

Percentage of total deaths occurring in public institutions (within County)—17.

Number of women dying in, or in consequence of childbirth—
From sepsis—Nil.
From other causes—3.

Death rate of infants under one year of age per 1000 live births—
Legitimate—56. Illegitimate—80. Total—58.

Deaths from measles (all ages)—2.

Deaths from whooping cough (all ages)—7.

Deaths from diarrhoea (under 2 years of age)—12.

(The birth and death rates for the County based upon the Census figures, April 1931, are 19.2 per 1000 and 11.1 per 1000 respectively.)

BIRTH RATE.—This rate is a very slight increase as compared with the previous year, the figures being 19.5 and 19.4 respectively. The corresponding rate for England and Wales for 1930 is 16.3.

TABLE E.

TUBERCULOSIS ORDER, 1925.

		Number of premises on which disease was reported but not confirmed by Veterinary Inspector.	Number of premises on which disease was declared to exist by Veterinary Inspector.		Total number of Bovine Animals on premises (other than a market, fair, or saleyard).	Total number of animals examined by Veterinary Inspector.	Total number of animals reported as diseased by Veterinary Inspector.					Conclusions from Post-Mortem.					Total number of animals slaughtered.	Total compensation paid.	Total salvage.
							A	B	C	D	Total number of cases in which the diagnosis was aided by use of Tuberculin.	Total number of Animals.							
												A	B	C	D	E			
							Tuberculosis of the udder.	Giving Tuberculous Milk.	Tuberculous Emaciation.	Chronic cough and showing definite clinical signs of tuberculosis.	Total number of cases in which the diagnosis was aided by use of Tuberculin.	Having tuberculosis of the udder.	Giving tuberculous milk and showing lesions of Tuberculosis.	Suffering from Tuberculous Emaciation.	Affected but not as in columns A, B and C.	Not affected.			
10	72	Cows in Milk	354	168	2	—	21	—	10	7	—	19	1	—	27	£ 69 15 0	£ 20 10 0		
		Other Cows or Heifers	288	201	1	—	38	1	16	1	—	37	2	—	40	100 10 0	29 15 0		
		Other Bovine Animals	902	366	—	—	7	—	2	—	—	7	—	—	6	18 0 0	4 2 0		
10	72		1544	735	3	—	66	1	28	8	—	63	3	—	73	£188 5 0	£54 7 0		

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DEATH RATE.—A definite reduction in the County death rate is recorded for 1930, the figure being 11.2 as compared with 13.1 for 1929. The death rate for England and Wales for 1930 was 11.4.

INFANT MORTALITY RATE.—Deaths of infants under one year of age per 1000 live births numbered 58, as compared with 63 for the previous year. The figure for England and Wales for the same year is 60. The rate for illegitimate births is again as in previous years much higher than for legitimate births, viz., 80

GENERAL.—It is very satisfactory to record a fall in the death rate and also a decrease in the number of women dying in childbirth. Cancer was responsible for 140 deaths, a figure which is 13.6 per cent. of the total deaths from all causes. The mortality figure per 1000 of the population works out at 1.5. There are no special facilities available for the diagnosis and treatment of cancer in this area. Unfortunately the cause of cancer has yet to be found, although the search is an unceasing one. It cannot be repeated too often, that early detection of the disease followed by prompt surgical interference, offers the only hope of cure.

Table showing the chief killing diseases in Holland County during 1930.

Disease.	Total number of deaths.
Cancer	140
Heart Disease	140
Tuberculosis (all forms)	73
Pneumonia (all forms)	60
Bronchitis	46

CAUSES OF DEATH AT EACH AGE-PERIOD AND IN EACH DISTRICT, 1930.

CAUSES OF DEATH.	All Ages.										Urban Districts.					Rural Districts.			
	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and under 75.	75 and upwards.		Boston.	Spalding.	Holbeach.	Long Sutton.	Sutton Bridge.	Boston.	Spalding.	East Ellloe.	Crowland.
Enteric Fever . . . . .	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..
Measles . . . . .	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Scarlet Fever . . . . .	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Whooping Cough	2	3	..	..	..	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Diphtheria . . . . .	..	1	3	9	..	3	1	..	..	14	..	3	..	..	1	..	2	2	..
Influenza	1	1	..	..	..	1	2	4	1	12	2	1	..	2	..	1	1	..	..
Encephalitis Lethargica . . . . .	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	1	1	..	..
Meningococcal Meningitis . . . . .	..	..	1	..	16	27	13	..	..	62	18	..	3	2	..	15	12	3	1
Tuberculosis of Respiratory System . . . . .	..	..	2	2	..	1	3	..	..	11	3	1	..	1	1	22	1	1	1
Other Tuberculous Diseases	1	1	3	..	..	12	41	51	36	140	16	31	8	5	8	34	18	14	6
Cancer, malignant disease . . . . .	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..
Rheumatic Fever . . . . .	..	..	..	..	..	1	3	2	3	9	2	..	1	..	..	2	2	..	..
Diabetes . . . . .	..	..	..	..	..	1	14	16	35	66	13	8	12	2	3	19	5	4	..
Cerebral Hemorrhage . . . . .	..	..	..	..	..	1	30	40	60	140	25	26	6	4	9	34	20	11	5
Heart Disease . . . . .	..	..	..	..	1	9	2	6	17	25	2	6	3	..	1	6	4	2	1
Arterio-sclerosis . . . . .	..	..	..	..	..	..	5	14	17	46	10	8	..	2	1	17	4	2	2
Bronchitis	8	1	1	..	..	6	11	8	8	50	14	6	..	..	..	12	5	5	2
Pneumonia (all forms)	11	2	2	..	2	..	3	1	3	9	1	1	1	..	1	1	3	..	1
Other Respiratory Diseases . . . . .	..	..	2	..	..	..	2	1	1	4	2	..	..	..	..	1	1	..	..
Ulcer of Stomach or Duodenum . . . . .	..	1	..	..	..	..	2	..	..	12	2	..	..	..	..	3	2	1	..
Diarrhoea, &c. (under 2 years)	11	1	..	1	..	2	1	1	..	5	1	2	..	..	..	2	..	..	..
Appendicitis and Typhlitis . . . . .	..	..	..	1	..	1	1	..	1	3	..	3	..	..	..	2	..	1	..
Cirrhosis of Liver . . . . .	..	..	..	..	2	3	10	9	12	36	12	..	2	2	1	9	4	1	2
Acute and Chronic Nephritis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Sepsis . . . . .	..	..	..	..	1	2	..	..	..	3	..	1	..	..	..	1	..	1	..
Other accidents & diseases of Pregnancy & Parturition	52	..	..	..	1	..	..	..	..	53	13	9	..	1	1	23	2	3	1
Congenital Debility and Malformation, Prem. Birth. . . . .	..	..	..	..	1	2	6	1	..	10	..	2	1	..	..	1	4	2	..
Suicide . . . . .	..	..	5	2	13	8	4	1	2	36	6	1	4	2	2	8	4	7	2
Other deaths from Violence	1	..	4	8	6	13	46	39	123	258	61	39	7	8	8	60	50	20	5
Other Defined Diseases	15	4	4	..	..	..	1	..	..	2	..	1	..	..	..	1	..	..	..
Cause: ill-defined or unknown . . . . .	..	1	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..
ALL CAUSES	102	15	27	25	44	93	202	196	319	1023	207	160	57	31	40	268	148	83	29

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

(1) Public Health Officers of the County Council :—

County Medical Officer :

School Medical Officer :

Chief Tuberculosis Officer :

Chief Medical Officer for Maternity and Child Welfare :

H. C. Jennings, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

Assistant Tuberculosis Officers and

Assistant School Medical Officers :

A. H. Kynaston, M.R.C.S., L.R.C.P., D.P.H.

Esther Ashworth, M.B., B.Ch., D.P.H., D.T.M.

Assistant Medical Officer for Maternity and Child Welfare

Esther Ashworth, M.B., D.P.H.

Consulting Ophthalmic Surgeon :

T. H. Cresswell, D.O. (Oxon.), M.R.C.S., L.R.C.P.

Consulting Aural Surgeon :

J. J. Rainforth, F.R.C.S. (Eng.).

Medical Officers (part time) for Venereal Diseases :

C. Rolleston, M.A., M.D., M.R.C.P.

M. L. Bery, M.B., Ch.B., D.P.H.

Consultants under the Puerperal Fever and Pyrexia Regulations, 1926 :

C. E. S. Jackson, M.B., F.R.C.S. (Eng.).

R. Purves, M.B., F.R.C.S. (Edin.).

Inspector of Midwives :

H. C. Jennings, M.B., D.P.H.

Dental Surgeons :

A. W. Hendry, L.D.S. (Edin.).

J. Murphy, L.D.S. (Edin.).

District Medical Officers (Out-Relief) :

W. F. Attwater, M.R.C.S., L.R.C.P.
 R. M. Barrow, M.B., B.S.
 B. M. Bone, M.B., F.R.C.S. (Edin.)
 W. R. Burton, L.R.C.P., L.R.C.S.I., L.M.
 R. E. Crockatt, M.B., Ch.B.
 R. Edwards, M.R.C.S., L.R.C.P.
 P. V. Hardwick, M.B., Ch.B.
 C. G. Harper, M.R.C.S., L.R.C.P.
 T. A. G. Hudson, L.R.C.P., L.R.C.S.
 J. M. King, L.M.S.S.A., L.S.A.
 E. Morris, M.R.C.S., L.R.C.P., L.S.A.
 J. R. Munro, M.D., Ch.B.
 W. Ormsby, L.R.C.P.I., L.R.C.S.I., L.M.
 J. H. Power, M.R.C.S., L.R.C.P.
 G. W. Rogers, M.B., B.S., L.S.A.
 F. Walker, M.R.C.S., L.R.C.P.
 W. Watson, L.R.C.P., L.R.C.S. (Edin.), L.R.F.P.S.
 (Glas.)
 W. E. M. Wright, L.R.C.P., F.R.C.S. (Edin.).

Public Vaccinators :

All the District Medical Officers with the addition of
 J. G. Cormack, M.B., Ch.B., and exception of Dr.
 Wright.

Medical Officers to Council Institutions :

Boston—W. E. M. Wright, L.R.C.P., F.R.C.S. (Edin.).
 Spalding—J. R. Munro, M.D., Ch. B.
 Holbeach—F. Walker, M.R.C.S., L.R.C.P.
 Holland Sanatorium—H. C. Jennings, M.B., M.R.C.S.,
 D.P.H.

Public Analyst (part time) :

B. H. Gerrans, F.I.C.

Veterinary Surgeons (part time) :

L. L. Leach, M.R.C.V.S. H. C. Reeks, M.R.C.V.S.
 L. H. Leach, M.R.C.V.S. W. Hackett, M.R.C.V.S.
 F. C. Reeks, F.R.C.V.S. W. A. Dickinson, M.R.C.V.S.
 J. Hill, M.R.C.V.S.

Health Visitors, School Nurses, Tuberculosis Nurses, etc.

Miss A. D. Black†*	Miss H. E. Spencer*
Miss A. M. Parsons*	Miss H. M. Lewis†*
Miss A. A. Robinson†*‡	Miss E. O'Donoghue†*
Miss C. Edgeller.*†	

† Fully trained Nurse. * Certified Midwife.

‡ Cert. Royal San. Inst.

Matron, Holland Sanatorium :

Miss M. Shipstone.

Vaccination Officers :

H. W. Allen	Mrs. M. L. Marshall
H. Barrett	Mrs. M. M. Ostler
W. H. Cooper	E. Platt
Mrs. M. Dams	V. C. Slator
J. H. Graves	G. Ream
R. H. Haddon.	Mrs. A. E. Turner.

Chief Clerk :

Walter Ingram.

(2) Nursing in the Home.

(a) GENERAL.—At the following places local District Nursing Associations (affiliated to the Lincolnshire County Association) provide one nurse each for general and maternity cases, but not for infectious cases :—Crowland, Donington, Gedney, Gosberton, Holbeach, Holbeach Bank, Kirton, Long Sutton, Moulton, Pinchbeck, Sutton Bridge, Boston (2), Spalding (3). All these Associations receive grants from the County Council.

(b) INFECTIOUS DISEASES.—No arrangements exist.

(3) Midwives.—There are 19 midwives practising within the County area.

(4) National Health Insurance.—No work of the County Council is administered in co-operation with this service. The County Medical Officer is, however, one of the Council's representatives on the Holland Insurance Committee.

- (5) **Poor Law Medical Out-Relief.**—The County is divided into the following 23 districts for the purposes of the administration of medical out-relief:—Boston, Swineshead, Kirton, Sutterton, Benington, Skirbeck, Gedney Hill, Holbeach South, Holbeach North, Long Sutton, Tydd, Lutton and Gedney, Sutton Bridge, Spalding East, Spalding West, Moulton, Pinchbeck, Gosberton, Donington, Deeping St. Nicholas 1, 2, and 3, and Crowland.

As the boundaries of these districts in many cases sub-divide parishes irregularly, it is not possible to give a reliable estimate of the various populations.

The fees in connection with midwifery were found to vary considerably as between the three old Union areas. This matter was considered by the Public Assistance Committee during the year, and the fee now paid to District Medical Officers for this service is the same as that which they receive when called in as private practitioners by certified midwives.

- (6) **Laboratory Facilities.**—There is a small laboratory at the County Hall, Boston, which provides for sputum examinations and also for the examination of throat swabs. This work is done by the County Medical Staff and could be greatly extended if a trained laboratory assistant were appointed. It would not then be necessary to send samples of blood (Widal Tests), water, milk and foodstuffs to laboratories in London, as obtains at present.

The following table shows the amount of work done in the County Laboratory during the year :—

Material	No. Examined	No. Positive
Sputa	430	80
Throat Swabs	64	8
Various	2	nil

- (8) **Hospitals.**—The following Tables give a survey of the hospital services of the County :—

Table No. 1 gives a description of the Voluntary Hospitals and also the Isolation Hospitals, whilst Table No. 2 shows the number of available beds for various services.

ADOPTIVE ACTS, BYE-LAWS, ETC., IN FORCE IN COUNTY OF HOLLAND (1930).

ADOPTIVE ACTS.										BYE-LAWS.									
District.	P.H. Acts Amendment Act, 1890, pt. 3.	P.H. Amendment Act, 1907.	Infectious Diseases Prevention Act, 1890.	Private Street Works Act, 1892.	Scavenging and Cleansing P.H. Act, 1875, Sec. 44.	Prevention of Nuisances, P. H. Act, 1875, Sec. 44.	Common Lodging Houses, P.H. Act, 1875, Sec. 80.	Houses Let in Lodgings, P. H. Act, 1875, Sec. 90.	Offensive Trades, P. H. Act, 1875, Sec. 113.	Management of Mortuaries, P. H. Act, 1875, Sec. 141.	New Streets and Buildings, P. H. Act, 1875, Sec. 157.	Slaughter Houses, P. H. Act, 1875, Sec. 169.	Public Sanitary Conveniences, P.H. Acts (Amen.) Act, 1890, Sec. 20.	New Streets and Buildings, P. H. Acts (Amen.) Act, 1890, Sec. 23.	Scavenging and Cleansing, P.H. Acts (Amen.) Act, 1890, Sec. 26.	Dairies, Cowsheds and Milk Shops Order.	Free provision of Diphtheria Anti- toxin.	Provision of Bacteriological diagnosis.	
URBAN.																			
Boston	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	
Spalding	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	No	No	No	Yes	Yes	Yes	
Holbeach	No	Yes	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	No	No	No	Yes	Yes	No	
Long Sutton	Yes	Yes	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	
Sutton Bridge	No	No	No	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No	No	No	No	
RURAL.																			
Boston	Yes	No	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	
Spalding	No	No	Yes	No	No	No	No	No	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes	
East Elloe	No	Yes	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No	No	Yes	Yes	No	
Crowland	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	

The Corporation of Boston have adopted Parts II. to V. of the Public Health Act, 1925.

No. 1.

Name.	Situation.	Purpose.	No. of beds available.	Management.
The Hospital, Boston	South End, Boston	General	41 beds, 7 cots	Voluntary agency
The Johnson Hospital	Spalding	General	31 beds, 9 cots	Voluntary agency
Holland Sanatorium	Skirbeck Quarter, nr. Boston	Tuberculosis	26 beds	Committee of County Council
West Norfolk & Lynn	King's Lynn	General	63 beds, 12 cots	Voluntary agency
Stamford and Rutland General Infirmary	Stamford	General and Isolation	Gen. 52 beds, 10 cots Isol. 42 beds.	Voluntary agency
County Hospital	Lincoln	General	150 beds	Voluntary agency
Memorial Hospital	Peterborough	General	Winter—130 beds Summer—154 beds	Voluntary agency
The Isolation Hospital	Spalding	Infectious diseases	6 beds	Spalding Urban Coun.
The Isolation Hospital	Fleet	Infectious diseases	10 beds	Joint Hospital Board
Port Sanitary Hospital	Boston	Infectious diseases	8 beds	Joint Hospital Board
The Isolation Hospital	Boston	Infectious diseases	25 beds	Joint Hospital Board

No. 2.

Type of Case.	Institution.	Number of Beds.
General Medical	(a) Johnson Hospital, Spalding	) (a) 16 male 15 female (b) 21 „ 20 „
General Surgical	(b) Boston Hospital	
	(a) Johnson Hospital Spalding	
	(b) Boston Hospital	
Children	(a) Johnson Hospital, Spalding	9
	(b) Boston Hospital	7
Maternity	—	None
Venereal Diseases	Out-County Institutions	As required
Tuberculosis	Holland Sanatorium, Boston	13 male, 13 female
	Various Out-County Sanatoria	16 male, 16 female
Chronic Sick	Boston Institution	32 male, 28 female
	Spalding Institution	43 male, 42 female
	Holbeach Institution	34 male, 27 female
Mental	Bracebridge Mental Hospital, Lincoln	As required
Mental Deficiency	Out-County Institutions	When available
Orthopaedic	—	None
Ear, Nose and Throat	Boston and Spalding Hospitals	As required
Puerperal Fever and Puerperal Pyrexia	Boston Hospital Peterborough Hospital Stamford and Rutland Infirmary	} As required
Ophthalmia Neonatorum	Boston, Spalding and Holbeach Institutions Peterborough Hospital Stamford and Rutland Infirmary	
Blind persons (Women only)	Sunniholme, Pen Street, Boston	9 female

Operative surgery is only available within the County at the Boston and Spalding Hospitals. A certain number of persons resident within the County area obtain surgical treatment in London, King's Lynn, Peterborough, and Lincoln.

The Boston and Spalding Hospitals both have special departments for—

- (a) X-Ray.
- (b) Diseases of Ear, Nose and Throat.

whilst the Boston Hospital also has a special department for diseases of the eye.

Both the above-mentioned Hospitals, within their limits, fill a public need and the work done is of great value to the community. This is shown by the fact that beds rarely remain unoccupied in either Hospital for any length of time.

One looks forward to the time when it will be possible by co-operation between the County Council and the Voluntary Hospitals in the County for *all* forms of surgical treatment to be available within the County area.

Co-operation between the County Council and the Voluntary Hospitals at Boston and Spalding enables the latter to provide facilities for the operative treatment of enlarged tonsils and/or adenoids in school children, and for X-Ray examinations in connection with the Council's anti-tuberculosis scheme.

- (9) **Maternity and Nursing Homes.**—Only one application for registration has been made to the Council under the Nursing Homes Registration Act, 1927, and this application was granted. The Home concerned provides accommodation for general nursing as well as for maternity cases.

No application for exemption from registration has been received by the Council.

No County District has applied for delegation of powers under Section 9 (2) of the Act of 1927.

- (10) **Maternal Mortality.**—(See also pages 33 and 49). All cases of maternal death and cases of puerperal fever and pyrexia are investigated by the County Medical Staff in consultation with the medical practitioners in charge of the cases.

In connection with this matter I should again like to point out the urgent need for the provision of maternity beds within the County area. These beds should be provided by the County Council, thus allowing women of all walks of life to obtain such institutional care during childbirth if they so desire.

- (11) **Institutional provision for Unmarried Mothers, illegitimate Infants, and Homeless Children.**—No such provision within the County area.

- (12) **Institutional provision for the Care of Mental Defectives.**—There is no such provision within the County area, but the Lincolnshire Joint Board for the Care of Mental Defectives, of which Holland is one of the constituent Authorities, has purchased an estate (Harmston Hall) near Lincoln, as a nucleus for the development of a colony.

(13) Ambulance Facilities.—

- (a) *For Infectious Cases.*—A motor ambulance is provided in the north of the County by the Boston Urban and Rural Joint Board.
- (b) *Non-Infectious and Accident Cases.*—The St. John Ambulance Brigade provides a very efficient service, motor ambulances being stationed at Boston and Spalding.

(14) Clinics and Treatment Centres.—

(a) **MATERNITY AND CHILD WELFARE CENTRES.—**

Spalding—The Church Cote. Sessions are held every Tuesday afternoon.

Long Sutton—The Hut. Sessions are held every Friday afternoon.

Crowland—The Church Institute. Sessions are held on alternate Thursday afternoons.

Boston—Red Lion Street. Sessions are held every Wednesday afternoon at which mothers and children from the surrounding County area attend.

- (b) **ANTE-NATAL CLINICS.**—There are no such clinics in the County.

(c) **SCHOOL CLINICS.—**

Spalding—At rear of Holland House. Sessions are held every Tuesday and Saturday morning, and at such other times as are necessary.

Donington—The Dispensary. Sessions are held every Thursday morning, and at such other times as are necessary.

(d) **TUBERCULOSIS DISPENSARIES.—**

Boston—Holland Sanatorium.

Wednesday afternoon, 1.30 p.m.—4.30 p.m.

Thursday afternoon, 2.30 p.m.—4.30 p.m.

Tuesday evening (2nd and 4th), 6.30 p.m.

Spalding—Holland House.

Tuesday morning, 10.0 a.m.—12.30 p.m.

Donington—The Dispensary, High Street.

Thursday morning (1st and 3rd), 10.30 a.m.

- (e) **TREATMENT CENTRES FOR VENEREAL DISEASES.**
—There are no such centres within the County area, but arrangements have been made by the County Council whereby such cases may obtain treatment, as follows :—

Lincoln—Beaumont Manor.

Men—Mon. and Thurs., 5 p.m.

Women and Children—Mon., 10.15 a.m. Thurs., 9.45 a.m.

Peterborough—28, Fitzwilliam Street.

Men—Tues. and Fri., 6 p.m. to 7 p.m.

Women and Children—Tues. and Fri., 5 p.m. to 6 p.m.

Attendance for irrigation—Daily, 6 p.m. to 7 p.m.

King's Lynn—West Norfolk and Lynn Hospital.

Males and Females—Tues. and Fri., 6 p.m. to 7 p.m.

Attendance for irrigation—Daily, 6 p.m. to 7 p.m.

In-patient treatment can be obtained in exceptional cases.

Arrangements have also been made with the City Laboratory Bacteriological Department, 17, Park Row, Nottingham, for Wassermann Tests and microscopical examinations required by medical practitioners resident in the County area.

- (f) **ORTHOPAEDIC CLINICS.**—At present there are no such clinics in the County, but it is hoped during 1931 to start a comprehensive orthopaedic scheme for the County and clinics will be held in the out-patient departments of the Boston and Spalding Hospitals.

- (g) **DAY NURSERIES.**—There is one such day-nursery in Boston, under the control of a voluntary committee.

- (15) **The Local Government Act, 1929.**—The passing of this Act is an outstanding landmark in the evolution of the public social services in this country. The Act contains many provisions of very great significance to the Public Health Service and should in practice lead to the abolition of a great deal of overlapping which has occurred in the past. It will now be possible for a County Medical Officer of Health to survey and co-ordinate in his area all the various medical services of the State.

The effect of the Act on the Public Health Services can be summarised as follows :—

- (1) The transfer to County Councils of the administration of the Poor Law, involving the preparation of an administrative scheme which may have the effect
 - (a) of removing from the administration of the Poor Law such services as can be alternatively provided under the powers of another existing enactment.
 - (b) of referring certain Poor Law Services, as such, for administration by any committees of the Council having already duties of a like nature on behalf of, and subject to the general direction and control of, the committee responsible for the Poor Law administration.
- (2) The administration of Public Vaccination as a function of Public Health (Sec. 2).
- (3) The administration of Part I. of the Children Act, 1908 (Infant Life Protection) as a function of Maternity and Child Welfare (Sec. 2).
- (4) Consultation with the governing bodies and the medical and surgical staffs of voluntary hospitals, as to the provision of hospital accommodation within the Councils area of control (Sec. 13).
- (5) The transfer to the County Council of the duty of the Registration of Births, Deaths, and Marriages (Sec. 21).
- (6) The review of County Districts (Sec. 46).
- (7) Financial assistance by the County Council to Local Sanitary Authorities in the provision of or extension of schemes of water supply, sewerage, or sewage disposal (Sec. 57).
- (8) The preparation of a scheme for securing that appointments of District Medical Officers of Health shall, as they fall vacant, be filled by officers who shall be restricted by the terms of their appointment from engaging in private practice as a medical practitioner (Sec. 58).
- (9) The transfer, under certain conditions, of the administration of the Maternity and Child Welfare Act, 1918, from Authorities exercising the powers of that Act who are not Local Education Authorities, to the Authority which is the Local Education Authority (Sec. 60).

- (10) The survey of hospital accommodation for infectious disease within the County and the preparation of a scheme for improvement. New powers are also given to County Councils to provide isolation hospitals (Sec. 63).
- (11) The preparation of a scheme for securing the continuance of payment of grant to voluntary associations in connection with Maternity and Child Welfare (Sec. 101).
- (12) The almost complete abolition of the percentage grant system.

The County Council in their administrative scheme under the Act have taken the first steps towards securing co-ordination of the social services, by constituting the Public Health Committee together with five co-opted members (not being members of the Council) as the Public Assistance Committee.

The domestic control of the three Institutions in the County is in the hands of House Committees, but all matters of policy including contracts for food, and clothing stand referred to the Public Assistance Committee. By means of this procedure it will be possible to use the Institutions to the best advantage.

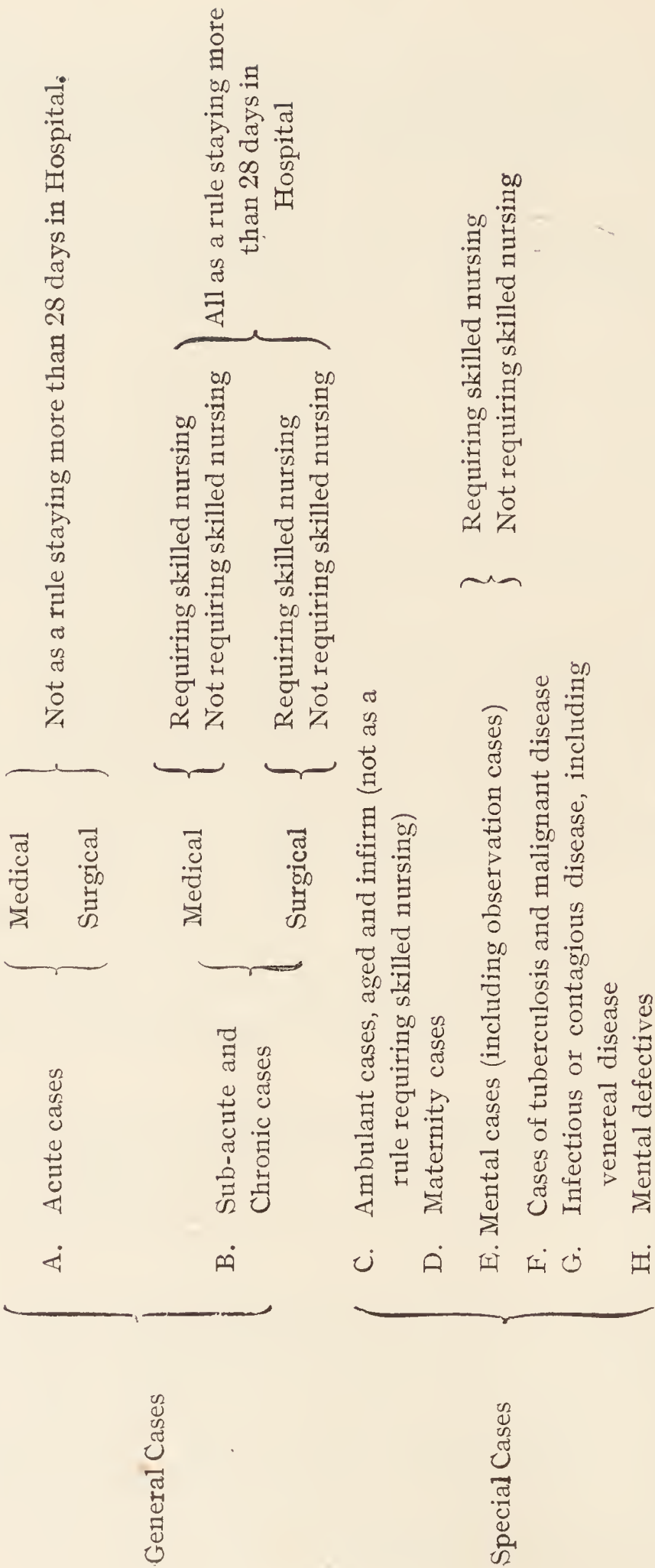
The scheme of the County Council also provides for "declarations," viz. :—

- (a) Blind Persons Act, 1920. The provision of domiciliary assistance to blind persons.
- (b) Public Health (Tuberculosis) Act, 1921. The provision of sanatoria and hospitals for the treatment of all forms of tuberculosis.

The administration of Public Vaccination has been placed in the hands of the Public Health Committee, whilst the duties under Part I. of the Children Act, 1908 (Infant Life Protection) have been allotted to the Maternity and Child Welfare Committee.

In order that the several Institutions shall be used to the best advantage it is obvious that classification of the various types of person admitted therein must be made. The following scheme of classification was drawn up by the County Medical Officer (who is also Medical Officer to the Public Assistance Committee). This scheme cannot be put into operation until many alterations, both structural and otherwise, have been made in the various Institutions.

CLASSIFICATION OF SICK PERSONS.



ACCOMMODATION CAN BE PROVIDED AS FOLLOWS:—

- | | |
|--|-----------------------------------|
| A. In Voluntary Hospitals. | G. Isolation Hospitals (in part) |
| B and D. In the Infirmeries of Institutions. | F. Sanatoria (in part) |
| C. In the House portion of Institutions. | E and H. In Special Institutions. |

It is obvious that in future the health of the people in the County will have to be dealt with from a broad "whole County" point of view and not from a narrow parochial outlook.

This will be especially evident in the uses to which transferred Institutions will be put, it being borne in mind that piecemeal adaptation will only be a waste of public money and that money spent on a new building or buildings will in the long run be more economical than patching up buildings which in most part have, by common consent, outlived their usefulness.

A survey of Isolation Hospital accommodation within the County has been made and two reports submitted. At the time of writing the Health Committee has deferred taking action along the lines of the reports until some future time.

The text of the reports on Isolation Hospital accommodation is given in the Appendix to this Report.

Towards the latter part of the year the question of the revision of County District Boundaries was considered by the Council and a scheme was formulated and approved and sent to the Ministry of Health. Objections to the scheme were received from several of the Local Authorities concerned and as a result an enquiry was held in March, 1931.

At the time of writing the result of the enquiry is not known.

The Council's scheme can be summarised as follows :—

- (a) the addition of portions of Skirbeck and Skirbeck Quarter to the Borough of Boston, and the taking away from the latter Borough of large portions of agricultural land.
- (b) adjustments to the boundaries of Spalding Urban District and the throwing into the Rural District of a certain amount of agricultural land hitherto within the boundaries of the former.
- (c) the amalgamation of Crowland Rural District with Spalding Rural District.
- (d) the de-urbanisation of Holbeach, Long Sutton, and Sutton Bridge Urban Districts with the resultant formation of an enlarged East Elloe Rural District.

SANITARY CIRCUMSTANCES OF THE AREA.

The general sanitary administration of the County is carried out by eleven District Councils.

URBAN DISTRICTS.

<u>District.</u>	<u>Name of M.O.H.</u>	<u>Address.</u>
Boston (Borough)	D. C. Robertson, M.B., D.P.H.	Municipal Buildings, Boston.
Spalding	J. R. Munro, M.D.	15, High Street, Spalding.
Holbeach	W. Ormsby, L.R.C.P., I., L.R.C.S., I., L.M.	Long Sutton.
Long Sutton	R. Murray Barrow, M.B., B.S.	Long Sutton.
Sutton Bridge	G. F. Collins, M.R.C.S., L.R.C.P., I., D.P.H.	Sudeley House, Sutton Bridge.

RURAL DISTRICTS.

Boston	D. C. Robertson, M.B., D.P.H.	15, Market Place, Boston.
Spalding	S. H. Perry, M.R.C.S., L.R.C.P.	The Master's Lodge, Spalding.
East Elloe	F. Walker, M.R.C.S., L.R.C.P.	Littlebury House, Holbeach.
Crowland	Esther Ashworth, M.B., D.P.H., D.T.M.	16, Cross Street, Spalding.

PORTS.

Boston	D. C. Robertson, M.B., D.P.H.	Municipal Buildings, Boston.
Wisbech	G. F. Collins, M.R.C.S., L.R.C.P., I., D.P.H.	Sudeley House, Sutton Bridge.

Whole-time qualified Sanitary Inspectors are employed in the Borough of Boston, Spalding Urban District, Spalding Rural District, and Boston Rural District.

The remainder of the Sanitary Authorities employ unqualified persons as Sanitary Inspectors (in some cases part-time).

(a) WATER SUPPLY.

BOROUGH OF BOSTON.

The Boston Waterworks Company's undertaking became the property of the Corporation in April, 1931. The purchase price was £70,000.

During the year there was no shortage of water. The following show the result of analysis of a sample of Town water :—

Sample taken on June 2nd, 1930.

On gelatine plates, kept for four days at 20 deg. C., 285 colonies per 1 c.c. developed : of these 80 or 40% liquefied gelatine.

On agar plates, kept for 24 hours at 37 degs. C., 28 colonies per 1 c.c. developed.

B. coli (types) present in 100 c.c.

Streptococci absent in 5 c.c.

B. Welshii (*B. enteritidis sporogenes*) absent in 5 c.c.

Result of examination. The presence of *B. coli* in 100 c.c. of the water is a somewhat unsatisfactory feature, otherwise no exception can be taken to the use of this water for domestic purposes on bacteriological grounds.

E. E. RAWLINSON, M.D., D.P.H.

Sample taken on June 2nd, 1930.

Reaction : Alkaline.

Colour in 2ft. stratum : Pale green.

Suspended matters : Nil.

Odour when warmed to 37 deg. C. : Nil.

	Parts per 100,000 *
Total solids dried at 100 deg. c.	31.00
Loss on ignition (after re-carbonating).....	10.00
Chlorine	2.80
Nitrites	Trace
Nitrates (Nitrogen as)	0.14
Saline Ammonia	0.001
Albuminoid Ammonia	0.104
Oxygen absorbed in 3 hours at 37 deg. C.	0.805
Hardness—Total	16.30
Hardness—Temporary	8.00
Hardness—Permanent	8.30
Poisonous Metals	Nil

Result of examination. The figures for the albuminoid ammonia are slightly high, otherwise no exception can be taken to the use of this water upon chemical grounds.

ALAN W. STEWART, D.Sc., A.I.C.

BOSTON RURAL DISTRICT.

In Skirbeck and Skirbeck Quarter the supply is the same as for the Borough of Boston.

“ The supply in the rural areas is mostly rain-water supplemented by wells almost wholly of the shallow variety. In many cases the rain-water cisterns are defective and want thorough cleansing. The supply is essentially of a hand to mouth character and the well water is mostly unfit for human consumption. A proper supply of wholesome water is urgently required for the whole rural area, and it is to be hoped that, in the near future, some scheme will be adopted so that each person has a wholesome and adequate supply of pure water.

There has been no analysis of the water during the year.”

SPALDING URBAN DISTRICT.

This district is fortunate in its supply. The water which is plentiful and pure is obtained from artesian wells at Bourne. These wells are the property of the Council.

SPALDING RURAL DISTRICT.

During the year the Council have made considerable extensions, having purchased the Donington Waterworks Company, which has supplied the parishes of Donington, Gosberton, and Quadring. Extensions in this system have been made to the extent of 25 miles, which will enable a large number of houses and farms to be supplied. Five miles of mains have been laid in the parish of Surfleet, and a further mile in the parish of Peakhill. These extensions have been made on the circuit which obtains water from the Pinchbeck Jockey Drove bore.

No extensions have been made at the Hop Pole and Wheat-sheaf bores at Deeping St. Nicholas.

CROWLAND RURAL DISTRICT.

The supply is from shallow wells and rainwater cisterns.

In the south of the County a Joint Board consisting of the Holbeach, Long Sutton and Sutton Bridge Urban Districts and the East Elloe Rural Districts has been formed and will obtain water in bulk from the Spalding Urban District Council.

(b) DRAINAGE AND SEWERAGE, ETC.

BOROUGH OF BOSTON.

The west side of the Borough is sewered, but only portions of the east side. A comprehensive scheme has been prepared in anticipation of the enlargement of the Borough boundaries.

There are now only 6 ash closets left on the west side of the Borough. The east side is as in previous years, and will be dealt with on completion of the sewerage scheme.

The approximate number of sanitary conveniences in the Borough is as follows :—

Water Closets	.....	.....	.....	.....	1963
Slop Closets	.....	.....	.....	.....	1258
Ash Closets	.....	.....	.....	.....	670
Vaults	.....	.....	.....	.....	385

During 1930, 96 ash closets and 7 privy vaults were abolished and water closets provided.

The following table shows the progress of conversions since 1925 :—

	1925	1926	1927	1928	1929	1930
Vaults abolished	7	29	9	22	27	101
Ash closets abolished	60	49	54	274	509	1062
Slop closets abolished	38	41	15	—	—	94
Water closets provided	29	37	48	316	536	1069

BOSTON RURAL DISTRICT.

There has been no change during the present year. Skirbeck and Skirbeck Quarter are urgently in need of sewerage.

This matter will be tackled as soon as the boundary question is settled.

In Skirbeck ash closets have been substituted for privy vaults in some cases. In the rural areas no scheme is in operation and excrement disposal is mostly by means of earth closets and privy vaults.

SPALDING URBAN DISTRICT.

The scheme for sewage disposal on the west side of the town is now complete and connections are being made to the sewers rapidly.

A separate scheme for the east side of the town has been commenced.

In the remaining sanitary districts in the County excrement disposal is by means of

- (a) Vaults.
- (b) Earth closets (pans).
- (c) A minority of water closets.

These latter are connected to cesspools which have to be emptied by the occupiers of houses.

When the Joint Water Board in the south has completed its work, drainage and sewerage will be absolutely imperative in the urban portions of the area.

(c) **SCAVENGING AND REFUSE DISPOSAL.**

BOROUGH OF BOSTON.

House refuse is collected weekly and is disposed of by controlled tipping in a pit at the Dock. As a result of the careful control of the tipping no nuisance has arisen during the year.

SPALDING URBAN DISTRICT.

This Authority has installed a refuse destructor on the outskirts of the town.

BOSTON RURAL DISTRICT.

This Authority removes house refuse in Skirbeck, Skirbeck Quarter, and in the village of Kirton. The refuse is disposed of by means of controlled tipping.

In the Urban Districts of Holbeach, Long Sutton, and Sutton Bridge, house refuse is disposed of by means of tipping in pits.

(d) **SCHOOLS.**

These are fully considered in Part I. of my Report already published (April, 1931).

(e) **POLLUTION OF STREAMS.**

No action under the Rivers Pollution Prevention Acts has been deemed necessary during the year.

RATS AND MICE DESTRUCTION ACT, 1919.

The officers appointed to carry out the provisions of this Act are the Police Superintendents, and as a direct result of the efforts of these officers much good work continues to be done.

The reports received from the Superintendents of Police give the following information with reference to National Rat Week :—

NORTHERN DIVISION OF COUNTY.—The number of rats known to have been killed in the Division outside the Borough of Boston is 2,501 (including 20 mice). So far as the Borough of Boston is concerned, although about 400 handbills were distributed, it is reported that as far as could be ascertained no special efforts were made and it was not possible to confirm the killing of a single rat.

SOUTHERN DIVISION OF COUNTY.—A total of approximately 1,873 rats was destroyed by various means in the Division during National Rat Week, this total being exclusive of a large number killed by gas, which cannot be estimated, particularly in the Spalding Area.

The means employed for the destruction of the pests were dogs, ferrets, and various types of poison, and on farms by shooting. It was reported that the chemists in the district sold considerably more poison during Rat Week than at other times during the year. At Long Sutton the killing of rats seems to be more or less a week-end sport around various premises, whilst the opinion in the Crowland area appears to be that rats are not so numerous as they have been in previous years.

HOUSING.

(1) Housing (Rural Workers) Act, 1926.

No applications for assistance under this Act were received during the year.

(2) Housing Act, 1930.

Under this Act County Councils have been given important duties and responsibilities in connection with the housing of the working classes in Rural Districts. In order that County Councils may have a constant regard for the requirements of

their area Rural District Councils are required by the Act to give all such information as may reasonably be requested. The information which has been furnished by Rural District Councils up to the present has, with one exception, been practically valueless.

Unless full information as to housing requirements is furnished by the Rural District Councils there would appear to be no alternative for the County Council but to appoint a special officer to make a housing survey in rural districts.

The Act also provides for contributions from the County Council to Rural District Councils for the purpose of providing houses for the agricultural population.

The total number of houses erected in the County during 1930 was 386, and the following Table shows how this work was done in each of the sanitary districts :—

	Houses erected by Council under Housing Acts.	Houses erected by Private Enterprise
Boston M.B.	12	12
Spalding U.D.C.	59	30
Holbeach U.D.C.	18	11
Long Sutton U.D.C.	15	1
Sutton Bridge U.D.C.	40	4
Boston R.D.C.	67	54
Spalding R.D.C.	42	10
East Elloe R.D.C.	nil	9
Crowland R.D.C.	1	1

INSPECTION AND SUPERVISION OF FOOD.

Food and Drugs Acts. The official responsible for the administration of these Acts is the Chief Constable of the County, the sampling officers being Police Inspectors. The following information has been taken from the quarterly reports of the County Analyst, Mr. Gerrans, F.I.C. :—

Nature of Articles submitted for Analysis	By whom submitted	Result of Analysis	Observations
39 Milk	Inspectors of Police	Genuine	
2 Milk	„	Adulterated as under :—	
		1—20% fat deficient	*
		2—8% extraneous water	†
2 Butter	„	Genuine	
1 Butter	„	Inferior	
3 Margarine	„	Genuine	
1 Margarine	„	Inferior	
1 Ground Rice	„	Genuine	
1 Pepper	„	„	
2 Cocoa	„	„	
2 Rice	„	„	
2 Jam	„	„	
1 Mixed Jam	„	„	
3 Sugar	„	„	
2 Gin	„	„	
2 Pea Flour	„	„	
1 Bread	„	„	
1 Sausages	„	„	
3 Oatmeal	„	„	
1 Beer	„	„	
2 Tinned Cream	„	„	
1 Decolourised Tinct. of Iodine	„	„	
1 Tincture of Iodine	„	„	
1 Flowers of Sulphur	„	„	
1 Blaud Pills	„	„	
1 Tea	„	„	
1 Lard	„	„	
1 Whiskey	„	„	
2 Honey	„	„	
1 Mustard Mixture	„	„	
1 Baking Powder	„	„	
1 Custard Powder	„	„	
1 Eucalyptus Oil	„	„	
1 Fish Paste	„	„	
1 Brandy	„	„	
1 Rum	„	„	
1 Amm. Tincture of Quinine	„	„	
1 Coffee	„	„	

* 1—Vendor summoned. Case dismissed.

† 2—Vendor summoned. Fined £2.

Milk and Dairies (Consolidation) Act, 1915. No action was taken under Section 3 of this Act during the year.

Milk and Dairies Order, 1926, Part IV., Sec. 8. No inspections of cattle under this Section have been made during the year.

Milk (Special Designations) Order, 1923. Licences to produce "Grade A" milk were renewed to two farmers, both in the north of the County. 9 samples of these milks were examined bacteriologically during the year and on each occasion the bacterial count was well within the limits laid down in the Order.

I am glad to report that it is now possible to procure certified milk in the Borough of Boston. This milk of high standard is produced outside the county and retailed in the Borough.

A memorandum on the subject of bovine tuberculosis in man has recently been issued by the Ministry of Health, and the main facts set forth in this memorandum were summarised as follows :—

- (1) The death rates for non-pulmonary forms of tuberculosis in England and Wales, while still high, are decreasing, the rate for 1929 being less than half that for 1911. Loss of life and invalidity from this disease are, however, still matters for grave concern.
- (2) It is not possible at present to say what proportion of the cases of tuberculosis in human subjects are of bovine origin, but it seems probable that more than 1,000 children under 15 years die annually in England and Wales from infection of this origin.
- (3) It is practically certain that the great majority of human infections with the bovine tubercle bacillus are conveyed by means of cow's milk, and that infection usually occurs during the early years of life, when milk forms a large part of the diet and when susceptibility to infection is greatest.
- (4) The proportion of milch cows in this country infected with tuberculosis is not accurately known, but there is reason to believe that it is not less than 40 per cent. Cows are much more often affected than other bovines, and those suffering from tuberculosis of the udder are responsible for most of the infection in human beings. The proportion of cows so affected has been variously estimated at 0.3 per cent. to 6 per cent. These estimates, however, apply to cases of "open" tuberculosis and there are in addition, many cows showing no clinical signs of tuberculosis but excreting the bacilli in their milk and faeces. The proportion of cows actually yielding tuberculous milk is probably between 1 per cent. and 2 per cent. Whether the incidence of tuberculosis in bovines is increasing or decreasing is not known.
- (5) Complete eradication by means of universal tuberculin testing and the slaughter of all reacting animals is not practicable in this country, not only on account of the expense and the dislocation of the milk supply which would be involved in any attempt at such a measure, but also because it is doubtful whether complete and permanent

TUBERCULOSIS ORDER, 1925.

	Number of premises on which disease was reported but not confirmed by Veterinary Inspector.	Number of premises on which disease was declared to exist by Veterinary Inspector.		Total number of Bovine Animals on premises (other than a market, fair, or saleyard).	Total number of animals examined by Veterinary Inspector.	Total number of animals reported as diseased by Veterinary Inspector.					Conclusions from Post-Mortem.					Total number of animals slaughtered.	Total compensation paid.	Total salvage.
						A	B	C	D	Total number of cases in which the diagnosis was aided by use of Tuberculin.	Total number of Animals.							
											A	B	C	D	E			
						Tuberculosis of the udder.	Giving Tuberculous Milk.	Tuberculous Emaciation.	Chronic cough and showing definite clinical signs of tuberculosis.	Total number of cases in which the diagnosis was aided by use of Tuberculin.	Having tuberculosis of the udder.	Giving tuberculous milk and showing lesions of Tuberculosis.	Suffering from Tuberculous Emaciation.	Affected but not as in columns A, B and C.	Not affected.			
3	59	Cows in Milk	270	140	1	—	19	4	4	1	—	19	3	—	24	£ 58 10 0	£ 17 2 6	
		Other Cows or Heifers	248	198	—	—	28	4	4	—	—	28	3	—	32	76 10 0	20 12 6	
		Other Bovine Animals	619	281	—	—	7	2	3	—	—	7	2	—	9	20 5 0	5 12 6	
3	59		1137	619	1	—	54	10	11	1	—	54	8	—	65	£155 5 0	£43 17 6	

eradication could be effected by this means. A less drastic procedure, but one also involving the slaughter of infected animals, is represented by the Tuberculosis Order of 1925. This Order aims at the destruction of cattle in an advanced and more infectious stage of the disease and cannot be expected, without the introduction of adjuvant measures, seriously to affect the incidence of the disease in cattle or man.

- (6) The method of building up tuberculosis-free herds has been discussed, and the financial and other difficulties in the way of its success have been pointed out, but it is to be hoped that a more extensive trial will be given to it in this country.
- (7) Calmette and Guérin claim to be able to prevent tuberculosis in young calves and babies by protecting them with their vaccine, known as B.C.G. This claim has not yet been established for babies, but there is evidence that a certain degree of immunity may be produced in young calves.
- (8) The next method of control considered is one which has only been tried to a small extent in England and Wales, but has given such encouraging results in Scotland, that its area of operation is being rapidly extended. This method is the routine clinical examination of cattle, which, to be fully effective, should involve the thorough and systematic examination by competent veterinary surgeons of all the milk herds at stated intervals, say twice a year, and the exclusion of those found diseased. There is reason to believe that such a procedure, when employed in combination with other methods of prevention, is productive of beneficial results.
- (9) The testing of milk by the microscopic and biological methods can be of great value, especially when applied to samples from herds of moderate size (a complete list of the contributing cows being made at the time of sampling) and combined with competent clinical examination of the cattle.
- (10) All measures aimed at the reduction of bovine tuberculosis must lose a great part of their effect so long as milch cows are kept under conditions which favour the spread of tuberculous infection. The education of the cowkeeper in the prevention of bovine infection should therefore occupy a prominent place in any scheme for the eradication of bovine tuberculosis.
- (11) A limited success has been achieved by the scheme for grading milk [Milk (Special Designations) Order, 1923]. The campaign in favour of clean raw milk, must, however, be regarded as of great potential value, and the official grading of milk would constitute an important element in any comprehensive scheme for the improvement of the milk supply.
- (12) The Manchester Clauses and the provisions of the Milk and Dairies (Consolidation) Act, 1915, which superseded them, appear to have had but little effect upon the incidence of bovine tuberculosis or the sale of tuberculous milk, though the educational value of these measures has probably been far from negligible. The factors limiting their utility have been pointed out, and a consideration of these demonstrates the paramount importance of those measures which are applicable to the source of infection or its near neighbourhood.

- (13) This conclusion does not justify the neglect of safeguards for the milk consumer which can be applied to the milk after production and before delivery. In connection with pasteurisation it has been shown that, subject to careful operation and scientific control, this process ensures a milk which not only is safe for consumption, but also retains its food value practically unimpaired by the heat to which it is subjected.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

Small-Pox. The County was free from this disease throughout the whole year.

Scarlet Fever. The number of notifications of this disease (162) was practically the same as in the previous year. The disease was most prevalent in the Boston Rural District, but as in previous years the disease was of a mild character and there were only two deaths.

Diphtheria. This disease was not so prevalent as in the previous year, there being 139 cases notified as compared with 163 in 1929. As in the latter year most of the cases occurred in the Borough of Boston and surrounding Rural District (86 out of 139).

Fourteen deaths were recorded, giving a case mortality of 10 per cent. The two largest Urban Authorities should most seriously consider the question of Schick testing and immunising amongst their child populations.

Enteric Fever. Six scattered cases occurred during the year, resulting in one death.

Erysipelas. All of these cases, 29 in number, were scattered over the whole County and were quite unconnected.

Pneumonia (all forms). Fifty cases were notified and the same number were registered as having died from pneumonia. This does not mean that the case mortality was 100 per cent. but that the notification of the disease was very incomplete.

Encephalitis Lethargica. Three cases of this disease were notified and all of them died.

Infectious Diseases notified in Holland County for the year ending 31st December, 1930

District.	Small Pox	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Puerperal Pyrexia.	Encephalitis Lethargica	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other forms of Tuberculosis.	Pneumonia	Poliomyelitis	Total	Whether there is an Isolation Hospital for infectious diseases.	Total available beds.	Number of diseases that can be treated concurrently.
Urban Districts.																	
Boston	30	11	25	1	..	1	3	3	29	10	22	..	135	Yes	*17	2
Spalding	34	5	6	..	..	..	..	2	11	1	..	..	59	Yes	6	1
Holbeach	3	2	32	3	..	..	..	..	7	..	2	..	49	..	†10	2
Long Sutton	1	..	1	..	2	..	†	..
Sutton Bridge	1	..	1	..	..	..	..	..	2	1	..	..	5	..	†	..
Rural Districts.																	
Boston	56	9	52	1	..	1	..	5	35	5	17	..	181	..	*	..
Spalding	8	2	24	..	1	1	1	..	14	1	1	..	53	Yes	‡4	1
East Elloe	7	1	18	1	1	..	..	1	8	2	1	1	41	..	†	..
Crowland	2	4	..	1	..	..	..	..	..	7	..	14	..	†	..
	—	139	32	162	6	3	3	4	11	107	20	51	1	540			

* These contribute to a joint Hospital situated at Boston.

† These contribute to a joint Hospital situated at Fleet (Holbeach).

‡ This Authority pays a yearly fee for the admission of small-pox and other fever cases to the Peterborough Fever Hospital.

§ This Authority contributes to a joint Hospital situated at Bourne.

Ophthalmia Neonatorum. During the year 14 cases of ophthalmia were notified and of these three received institutional treatment under the scheme of the County Council, and one was treated in the Spalding Hospital.

Cases.			Vision unimpaired.	Vision impaired.	Total blindness.	Deaths
Notified	Treated					
	At home	In hospital				
14	10	4	13	Nil	Nil	1

Puerperal Fever and Pyrexia. Three cases of the former and three of the latter were notified. Two out of these six cases received institutional treatment and there were no deaths.

Consultants are appointed by the County Council for puerperal fever and pyrexia and such service was made use of in connection with one of the above-mentioned cases.

Whilst there were 1,771 births during 1930, 3 mothers died from conditions directly associated with child birth other than puerperal fever and pyrexia. This gives a rate of 1.7 per 1,000, which is approximately half that for 1929.

Further information in connection with this matter is given on page 49.

Measles. In no area in the County is this disease notifiable. Two (2) deaths, however, were registered during the year.

Whooping Cough. Seven (7) deaths occurred from this disease, and all were in children of five years of age or under.

Diarrhoea. This condition was not epidemic in any portion of the County during the year, but 12 deaths were registered in infants under two years of age.

Influenza. There was no serious epidemic of this disease during the year, and only 12 deaths were registered as compared with 87 in the previous year.

A scheme for adequate isolation hospital accommodation is set out in the Appendix.

Although scarlet fever is at the present time a comparatively mild disease it will still be necessary in a large part of the area to isolate such cases in properly equipped hospitals. Where, however, home conditions are satisfactory, scarlet fever cases need not be removed to hospital and the beds thus set free used for the purpose of nursing cases of measles and whooping cough with complications. It is still not realised by the public that these two latter diseases when associated with pneumonia or broncho-pneumonia take a much greater toll of life than does the present mild form of scarlet fever. During 1930 there was one death from scarlet fever and nine from measles and whooping cough.

In any new isolation hospitals which may be built in the area, provision should most certainly be made for the treatment of complicated cases of measles and whooping cough.

VACCINATION.

As mentioned in a previous part of the Report, work in connection with vaccination has been administered through the County Health Department since April, 1930. A study of the Table on page 35 will prove very illuminating, as it shows that in 1929 (the preliminary figures for 1930 are approximately the same) only 13.7 per cent. of the total number of children whose births were registered during the year were vaccinated.

When Acts of Parliament contain a legal procedure for nullifying the very purpose for which the Acts were passed, the result cannot be other than it is. In fact the whole matter becomes futile and ridiculous and makes one wonder whether the results justify the amount of money spent in administering the law. If compulsory vaccination is not to be strictly enforced, why not let us be quite candid about it and make it voluntary.

VACCINATION.

Return respecting vaccination of children whose births were registered from 1st January to 31st December, 1929, inclusive.										Preliminary Return for the year 1930.	
Registration Sub-District.	Births Registered.	Successfully vaccinated.	Insusceptible of vaccination.	Conscientious objections.	Died unvaccinated.	Removals.	Not accounted for.	Successful primary vaccinations.	Conscientious objections.		
Boston	403	27	—	356	15	—	5	34	287		
Benington	206	57	2	142	3	2	—	61	104		
Kirton	223	54	—	155	12	1	1	53	154		
Holbeach	182	30	—	145	5	2	—	27	122		
Long Sutton	226	37	—	175	6	5	—	45	158		
Gedney Hill	36	7	—	29	—	—	—	1	24		
Pinchbeck	46	4	—	36	1	—	5	7	68		
Donington	51	2	—	38	1	—	10	2	38		
Gosberton	54	3	—	48	—	3	—	5	27		
Spalding	223	8	—	194	5	12	5	—	204		
Moulton	65	2	—	57	3	2	—	3	45		
Deeping St. Nicholas	27	5	—	21	—	—	1	11	29		
Crowland	47	9	—	37	1	—	—	8	22		
Total	1789	245	2	1433	52	27	27	257	1282		

PREVENTION OF BLINDNESS.

Blind Persons Act, 1920. As part of the County Council's scheme under the Local Government Act, 1929, a declaration was made, viz., the provision of domiciliary assistance to blind persons. This stands referred to the Boston and Holland Blind Society, to whom work under the Blind Persons Act, 1920, had been delegated for some years past.

The work of the Society could be much amplified if the domiciliary assistance to the dependants of blind persons were also administered by them.

BLIND PERSONS IN COUNTY OF HOLLAND.

Age Period.	Total Blind
0— 5	3
5—16	11
16—21	3
21—50	34
50—70	49
70 and upwards	43
Total	143

Age at which Blindness occurred.

Age Period.	Number.
0— 1	15
1— 5	5
5—10	4
10—20	6
20—30	13
30—40	11
40—50	22
50—60	20
60—70	29
70 and upwards	17
Unknown	1
Total	143

The Report of the Society upon the work done during the year ended March 31st, 1931, is as follows :—

The Committee regret to report a further increase in the number of blind persons on the Society's register, the number now being 143, as against 139 a year ago.

Of the 143 cases on the register, 3 are under five years of age, 11 are between five and sixteen, 3 are between sixteen and twenty-one, 34 are between twenty-one and fifty, 49 are between fifty and seventy, and 43 are over seventy.

It is of interest also to note that 20 were born blind or became blind before five years of age, 10 became blind between the ages of five and sixteen, 4 between sixteen and twenty-one, 43 between twenty-one and fifty, 47 between fifty and seventy, 18 over seventy and 1 unknown. The fact that so many persons have become blind during middle life is a matter of serious concern, not only in this area but throughout the country.

There have been 17 new cases during the year and two removals from other districts. Nine deaths have occurred and five blind persons have left the district. Twenty-three cases are now under observation.

As a result of the coming into force of the Local Government Act, 1929, the work of the Society has been considerably extended, in that blind persons who hitherto have been chargeable under the Poor Law, have now to be dealt with by the Society.

The Committee greatly appreciate the financial support given to the Society during the past year, but they have reason to believe that it is not yet fully realised that the responsibility for the welfare of all the civilian blind in the Holland Division of Lincolnshire rests with this Society, and they hope that the time will soon come when every parish in the area will take its share of the financial burden.

Five children are receiving elementary education at schools recognised by the Board of Education as efficient schools for the education of the blind, and one young woman is receiving technical training at the Royal Midland Institution for the Blind, Nottingham. The cost of the education and training in these six cases is borne by the County Education Committee and contributions from parents.

The Society has eight blind Home Workers, of whom seven are attached to the Royal Midland Institution for the Blind, at Nottingham, for assistance and supervision. The occupations carried on by these Home Workers are hand and machine knitting, chair caning, boot and shoe repairing, and straw basket making. The other Home Worker is attached to the National Library for the Blind, for whom she copies books in Braille. The earnings of these Home Workers are augmented out of the funds of the Society, the rate of augmentation varying from five to ten shillings a week according to their earnings.

Orders for socks and stockings and straw baskets, and chair caning are greatly needed and orders may be given at Sunnihilme, Pen Street, Boston.

The Society is also paying £40 a year in respect of a young man employed as a basket maker in the workshop of the Nottingham Institution. This payment is made in order to augment his earnings.

The visitation of the blind in their own homes and the teaching of them, when possible, of handicrafts and embossed types, continues to be carried on by Miss Faith Booth, who has been blind from birth, and thoroughly understands the blind and their needs, and by Miss Hovey, who chiefly teaches or visits those who live in outlying places.

There are now nine residents at Sunnihilme, the Home and Hostel for Blind Women, and others have lived there for various periods during the year.

The sum of £620 has been given to necessitous blind during the year the greater part of it having been given as regular allowances. The pleasure and freedom from anxiety resulting from these gifts cannot be estimated.

Once a month in Boston there is an entertainment for the blind, and also a meeting for reading aloud, together with light refreshments. On July 12th there was a Garden Party for the blind and their friends in the grounds of Hussey House, Boston, kindly lent by Mr. Towell. An excellent tea was served on the lawn and later in the evening refreshments were handed round. Mr. and Mrs. Towell did their utmost to secure the comfort and pleasure of the guests, and a most happy time was spent. A New Year's Party for the blind and their friends was given by the Society in the Red Lion Street Congregational Schoolroom, Boston, on January 5th, when there was a tea followed by a programme of music, recitals, etc. During the evening the blind people presented Mr. A. K. Turner, who is resigning from the position of Secretary of the Society, with a gold watch, and Mrs. Turner with a rose bowl, as a token of gratitude for the splendid work of Mr. and Mrs. Turner on their behalf for so many years.

Prevention of blindness is one of the objects of the Society, and help is frequently given to those suffering from eye trouble to obtain expert advice and treatment or glasses.

The Committee gratefully acknowledge a legacy of £275/8/10 from the late Miss M. A. Shelton, of Spalding. The money has been invested in the names of Trustees in the purchase of 5% War Loan Stock.

The Committee regret to report the resignation of Dr. Rendall and desire to express their thanks for his service to the Society. The Committee have been glad to welcome as a new member Councillor Leggott, of Wigtoft, who is a representative of the Holland County Council Health Committee.

The Committee record with great regret the resignation of Mr. A. K. Turner, who has been Secretary of the Society since its inception. Mr. Turner's splendid work and enthusiasm in the cause of the blind has done so much to raise the Society to its present position, and the Committee are therefore glad that he has consented to become a member of their body.

The Committee gratefully acknowledge their indebtedness to Dr. J. Braithwaite, Mr. T. H. Cresswell, D.O. Oxon., M.R.C.S., L.R.C.P., and Mr. S. T. Parker, F.R.C.S., for their valuable professional advice, and to Mr. D. MacTaggart, L.D.S., F.P.S., for free dental treatment on the recommendations of the Society; and to members and officials of the Holland County Council, and other local authorities for their unfailing courtesy and sympathetic help.

Arrangements now exist whereby children under five years of age and attending an Infant Welfare Centre may receive treatment (operative or otherwise) for conditions affecting vision.

TUBERCULOSIS.

The total number of cases of tuberculosis (all forms) notified during the year was 128 as compared with 124 for 1929 and 171 for 1928.

There were 73 deaths from all forms of tuberculosis during the year, giving a mortality rate of .8 per 1000 of the population for the whole County. The number of deaths from pulmonary tuberculosis was 62, which gives a rate of .7 per 1000 of the population.

The Holland Sanatorium provides accommodation for 26 cases mostly of an advanced type. The early cases are sent to Institutions outside the County and such accommodation is provided for a further 30 cases.

During the year 55 X-Ray examinations were made as aids to diagnosis in pulmonary and non-pulmonary cases.

The work of the Council's Anti-Tuberculosis Scheme has proceeded satisfactorily during the year and it is gratifying to note that during 1929 (the last year for which comparative figures are available) there were only seven counties out of 62 in England and Wales which had a lower death rate for all forms of tuberculosis, than the County of Holland.

In order to deal successfully with outbreaks of infectious disease it is necessary that there shall be

- (a) prompt notification of cases,
- (b) adequate isolation of patients,
- (c) disinfection of premises and clothing,
- and (d) supervision of all contacts.

Where diseases such as enteric fever, scarlet fever, diphtheria and small-pox, etc., are concerned isolation usually means transfer of patients to a properly equipped isolation hospital. In the case, however, of tuberculosis, provided the home conditions are satisfactory it is by no means necessary to remove the patient. A patient suffering from open tuberculosis and who is properly trained and living under decent conditions need not be a source of infection to others. It is the open case of tuberculosis which is the danger and as long as there is not efficient supervision and management of the open case any anti-tuberculosis scheme is doomed to failure.

It will thus be seen that overcrowded, defective or insanitary houses cannot under any circumstances provide for the effective isolation of cases of open tuberculosis. There is also another point to be considered, namely, the social and economic loss which ensues as a result of allowing persons who have had sanatorium treatment to return to overcrowded or defective houses.

Publicity has recently been given to the high death rate from tuberculosis of all kinds in the Borough of Boston as compared with the rest of the County of Holland, and I would most earnestly suggest to the Corporation of Boston that they consider the possibility of allocating say 5 per cent. of all new houses erected by them for the use of persons suffering from tuberculosis. The presence of one of more cases of tuberculosis in a family would not

of itself entitle such a family to a new house, but only those families which in the opinion of the Chief Tuberculosis Officer are living under conditions tending to foster the spread of disease, would be nominated by him for preferential treatment.

In cases where the financial condition of the family is bad, and has in fact been made worse by the presence in it of one or more cases of tuberculosis, the new houses should be let at a rent which the family can pay, even if the Local Authority or the State has to bear the loss.

This suggestion could be considered with advantage by all Local Authorities in the County, but more especially by the Urban Authorities.

If this matter is to be treated seriously sacrifices will have to be made and it is surely much better to spend public money in preventing the spread of disease than allowing fresh cases to arise and then spending large sums of money for treatment.

A considerable proportion of the non-pulmonary forms of tuberculosis in children are due to the drinking of infected milk in the early years of life, and consequently the eradication of bovine tuberculosis is a question of supreme importance. This matter is referred to more fully on page 30, but suffice it to say, that failing the general use of specially designated milk there seems no alternative but to pasteurise all raw milk.

Dispensaries. Sessions are held at the Boston Dispensary on Wednesday and Thursday afternoons and on the evenings of the second and fourth Tuesday in each month.

At the Spalding Dispensary on Tuesday mornings and at Donington on the first and third Thursday morning in each month.

ATTENDANCES 1929 and 1930.

		New Cases*		Total Attendances	
		1929—1930		1929—1930	
Boston .....	.....	273	279	786	897
Donington .....	.....	20	14	86	91
Spalding .....	.....	101	84	255	217

* including contacts.

Year	1925	1926	1927	1928	1929	1930
Total Attendances	734	867	1046	1243	1127	1205

Infectious Diseases notified in Holland County for the year ending 31st December, 1930

District.	Small Pox	Diphtheria (including Membranous Croup).	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Puerperal Pyrexia.	Encephalitis Lethargica	Ophthalmia Neonatorum.	Pulmonary Tuberculosis.	Other forms of Tuberculosis.	Pneumonia	Poliomyelitis	Total	Whether there is an Isolation Hospital for infectious diseases.	Total available beds.	Number of diseases that can be treated concurrently.
Urban Districts.																	
Boston	30	11	25	1	..	1	3	3	29	10	22	..	135	Yes	*17	2
Spalding	34	5	6	..	..	..	..	2	11	1	..	..	59	Yes	6	1
Holbeach	3	2	32	3	..	..	..	..	7	..	2	..	49	..	†10	2
Long Sutton	1	..	1	..	2	..	†	..
Sutton Bridge	1	..	1	..	..	..	..	..	2	1	..	..	5	..	†	..
Rural Districts.																	
Boston	56	9	52	1	..	1	..	5	35	5	17	..	181	..	*	..
Spalding	8	2	24	..	1	1	1	..	14	1	1	..	53	Yes	§4	1
East Elloe	7	1	18	1	1	..	..	1	8	2	1	1	41	..	†	..
Crowland	2	4	..	1	..	..	..	..	..	7	..	14	..	†	..
	—	139	32	162	6	3	3	4	11	107	20	51	1	540			

* These contribute to a joint Hospital situated at Boston.

† These contribute to a joint Hospital situated at Fleet (Holbeach).

‡ This Authority pays a yearly fee for the admission of small-pox and other fever cases to the Peterborough Fever Hospital.

§ This Authority contributes to a joint Hospital situated at Bourne.

To cope with the increasing numbers additional sessions have had to be held at the Boston Dispensary. Each patient undergoes a clinical examination and the time necessary for a thorough examination precludes more than a certain number being seen at each session.

The number of contacts examined was 86.

The necessity for examination of all members of the household from which a case of tuberculosis is notified is not yet appreciated to the extent it should be—opportunity is taken by the School Medical Officers, who are also Assistant Tuberculosis Officers, of specially examining all members of these families of school age during the course of the School Medical Inspections.

During the year 52 consultations were held with the patient's doctor.

Shelters. Thirty open-air shelters are in use by patients in the County—they are much appreciated and serve a most useful purpose in allowing the patient to live his home life under conditions which would not otherwise be possible.

Home Visiting. The Tuberculosis Officers paid 609 visits to patients in their own homes, and 1,895 visits were paid by the Health Visitors.

Surgical Tuberculosis. Institutional treatment is provided at special hospitals and during the year patients have been under treatment at the Royal Sea Bathing Hospital, Margate ; Harlow Wood Orthopaedic Hospital, Mansfield ; the Lord Mayor Treloar Cripple Homes, Alton ; Gringley Orthopaedic Hospital ; and Manfield Orthopaedic Hospital.

It is to be regretted that there are as yet no Orthopaedic clinics held in the County at which the after-care of these cases can be supervised by an Orthopaedic Surgeon.

Holland Sanatorium. During 1930, 60 cases were admitted, 16 were discharged with the disease quiescent, 28 were improved, in 5 cases the disease remained stationary, and there were 11 deaths.

The twenty-six beds were always fully occupied and one additional patient has been accommodated by using a shelter in the grounds.

In view of the lengthy period of treatment required by the type of case received, increasing difficulty is experienced in finding room for those patients on the waiting list, who, on account of home conditions, and lack of nursing facilities usually require prompt removal to an institution of this character.

The staff are again indebted to those ladies and gentlemen who at Christmas and other times, by coming to entertain the patients have done much to make dull days bright—they are especially grateful to the Sunday Service Committee of the Boston Men's Own Society for holding monthly musical services, and for the installation of a loud speaker—an adjunct to the wireless installation previously given which has proved so great a boon.

Thanks to the efforts of the Matron and Miss Black, one of the Council's Health Visitors, sufficient funds were obtained to purchase a piano for the use of the staff.

The cost per patient per week for the year 1930 was £2/14/8 as compared with £2/11/8 in 1929. This increase is partly due to the cost of re-decorating the exterior of the Sanatorium and adjacent buildings during 1930, a work which was urgently needed.

Dr. Kynaston, in a report on his work in the north of the County in connection with tuberculosis, states inter alia :—

“ There is no royal road to the eradication of tuberculosis ; only as the public become educated to the necessity of consulting a doctor at the onset of symptoms, rather than waiting until the disease has reached an advanced stage, can the rate of cure make progress. It will also be necessary to find means to ensure that no patient shall return to those unhealthy overcrowded homes from which so many cases arise.

The truest economy is so to provide that the mode of life of the people shall by its sound hygienic conditions nourish a race so healthy that the seed of tuberculosis shall indeed fall in stony ground. To this end the housing problem must be courageously tackled, a good standard of living for all must be maintained, and the teaching of hygiene must be so thorough that every member of the community shall not only know how to achieve health, but desire to do so.”

A Report on the incidence of tuberculosis in the Borough of Boston will be found in the Appendix, page 60.

Public Health (Prevention of Tuberculosis) Regulations, 1925. No action taken.

Public Health Act, 1925 (Sec. 62). No action taken.

The following Table gives particulars of new cases of tuberculosis and of all deaths from the disease in the area during 1930.

The number of non-notified tuberculosis deaths forms one-twelfth of the total tuberculosis deaths. I am of opinion that generally speaking, notification of tuberculosis in the area is efficient.

1

TUBERCULOSIS.
New Cases and Mortality during 1930.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1.....	—	—	—	—	—	—	—	1
1—5.....	2	1	4	1	2	—	3	1
5—10.....	2	6	3	3	—	—	2	—
10—15.....	4	4	—	2	1	1	—	—
15—20.....	5	5	1	—	1	4	—	—
20—25.....	11	7	1	1	7	4	—	—
25—35.....	13	12	—	—	7	10	—	—
35—45.....	6	6	—	3	9	1	—	—
45—55.....	13	4	—	1	5	5	—	1
55—65.....	2	1	—	1	2	1	3	—
65 and upwards	1	1	—	—	2	—	—	—
Totals	59	47	9	13	36	26	8	3

There were 6 non-notified tuberculosis deaths which were 8 per cent. of the total tuberculosis deaths.
These 6 deaths were all investigated and I was satisfied in each case that there was no evidence of wilful neglect or refusal to notify.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from the 29th Dec., 1929, to the 27th Dec., 1930, in the County of Holland, Lincs.

Notifications on Form A.													
AGE-PERIODS.	Number of Primary Notifications.										Total Notifications on Form A		
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Primary Notifications.	Total
Pulmonary Males..	—	2	1	3 (1)	5	11	13 (1)	6 (2)	13 (2)	2	1 (1)	57	58
“ Females	—	1	4	3	5	7	12 (2)	6 (1)	4 (2)	1	1	44	44
Non-Pulmonary Males	—	4	2 (1)	—	1	1	—	—	—	—	—	8	8
“ Females	— (1)	1	3	2	—	1	1	3	1	1	—	13	13

Number of Notifications on Form C													
AGE-PERIODS.	Notifications on Form B.										Total Notifications on Form B		
	Number of Primary Notifications.										Total Notifications on Form B		
	Under 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Poor Law Institutions.	Sanatoria.	
Pulmonary Males..	—	1	1	2	3	2	2	2	2	—	—	51	
“ Females	—	2	1	—	—	—	—	—	—	—	—	32	
Non-pulmonary Males..	—	1	—	—	—	—	—	—	—	—	—	5	
“ Females	—	—	—	—	—	—	—	—	—	—	—	5	

NOTE.—The figures in parentheses show the number of cases coming to the knowledge of the Medical Officer of Health otherwise than by notification under the Public Health (Tuberculosis) Regulations, 1912.

RESIDENTIAL INSTITUTIONS.

(A) AVERAGE NUMBER OF BEDS AVAILABLE FOR PATIENTS DURING THE YEAR 1930.

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total.
		"Sanatorium" Beds.	Hospital Beds.	Disease of Bones and Joints.	Other Conditions.	
Adult Males	—	5	13	5	—	23
Adult Females	—	4	12	6	—	22
Children under 15	—	5	—	5	1	11
Total	—	14	25	16	1	56

(B) RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT DURING THE YEAR 1930.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of Patients	Adults	M.	22	47	42	8	19
		F.	18	33	32	3	16
	Child- ren	M.	4	7	6	—	5
		F.	10	7	5	—	12
Number of Observation Cases	Adults	M.	—	1	1	—	—
		F.	—	—	—	—	—
	Child- ren	M.	—	—	—	—	—
		F.	—	1	1	—	—
	Total		54	96	87	11	52

MATERNITY AND CHILD WELFARE.

Midwives Acts, 1902—1926. The number of midwives who notified their intention to practise within the County during 1930 was 27, all of whom were trained women.

Each midwife was inspected at least once a quarter and in some cases more frequent inspections were made.

As in past years special enquiries were made in all cases of rise of temperature, still-birth, inflammation of the eyes, death of the child, artificial feeding, and liability of the midwife to be a source of infection.

Table of Notices received by the Holland Local Supervisory Authority.

Records for sending for medical help.....	163
Notices of still-birth	11
Notices of death of child	3
Notices of death of mother	Nil
Notices of laying out the dead	8
Changes of address notified to Central Midwives Board	Nil
Notices of liability to be a source of infection	4
Notices of artificial feeding	13

Classification of cases for which Medical help was sought during the year 1930.

PREGNANCY.

Ante-partum haemorrhage	4
Abortion	3
Swelling of legs	4
Albuminuria	3
Other conditions	6
	— 20

LABOUR.

Malpresentation	16
Excessive bleeding	4
Retarded placenta	3
Ruptured perineum	28
Delay in labour	41
Other conditions	4
	— 96

LYING-IN.

Rise of Temperature	7
Mastitis	1
	— 8

CHILD.

Dangerous feebleness	12
Inflammation of eyes	5
Stillbirth	11
Congenital malformation	2
Other conditions	9
	— 39
	163

130 claims for the payment of fees in accordance with Section 14 of the Midwives Act, 1918, were received from 19 medical practitioners to the amount of £175/18/0. This shows an increase of £50/1/0 as compared with 1929.

The sum of £26/7/6 was recovered from patients after careful enquiry into the financial circumstances of the household.

5 maternity outfits were sold during the year.

There are still many districts in the County in which there is no resident midwife. In some of the villages it should not be difficult to form District Nursing Associations, but in others the population is so small and scattered as to be quite unable to bear the financial burden of maintenance of a nurse. Financial assistance from some central authority will be absolutely essential in both cases. Until more District Nurses are provided it will still be possible for the unqualified woman to advance the plea of “ sudden or urgent necessity ” when accused of the illegal practice of midwifery.

Failing the formation of more District Nursing Associations I am of opinion that the requisite number of District Nurses should be provided directly by the County Council.

In order that the County Council should be acquainted fully with the present position of the Maternity and Child Welfare Service in the area, I considered it necessary to indicate the various branches of the work which should be included in a comprehensive scheme, and at the same time to compare them with the position at present obtaining in the County.

Comprehensive Scheme.

1—HEALTH VISITING, including visiting and supervision of all children under school age requiring this attention.

2—DISTRICT MIDWIVES, either subsidised or paid directly by the Local Authority, who may also be employed as Health Visitors for the districts.

3—HOME NURSING, including the nursing needed for expectant mothers, maternity nursing, the nursing of puerperal fever, and the nursing of measles, whooping cough and epidemic diarrhoea in young children, and of ophthalmia neonatorum.

4—HOME HELPS, i.e., suitable persons to carry out domestic duties including the care of other children in the home, and to look after the mother under the direction of the midwife.

5—SUPPLY OF MILK FOR EXPECTANT AND NURSING MOTHERS AND FOR INFANTS, at cost price or less than cost price in necessitous cases.

6—CRÈCHES AND DAY NURSERIES intended for children of mothers who go out to work during the day.

7—CONVALESCENT HOME TREATMENT to assist recovery after certain cases of confinement and for some conditions in young children, especially after measles and whooping cough.

8—HOSPITAL TREATMENT for children suffering from ophthalmia neonatorum, epidemic diarrhoea, etc.

Present Arrangements in this County.

1—There are 7 County Health Visitors who devote part time only to Maternity and Child Welfare Work, which must suffer in proportion as other duties increase.

2—The County Council pay grants to most of the District Associations but the midwifery service is still very incomplete, and many districts have no qualified midwives.

At least 4 additional midwives would be required to make the service at all adequate.

3—There is no provision whatever for home nursing, nor is the need a pressing one if adequate institutional accommodation were available.

4—There is no such provision in this area.

5—Dried milk only is issued from the Infant Welfare Centres with the result that a large proportion of cases, who are unable to attend the Centres, but *who could if necessary have fresh milk, are unprovided for.*

6—There is no provision of this kind, nor is such recommended.

7—There is no provision for this treatment.

8—The County Council have made arrangements for the institutional treatment of cases of ophthalmia neonatorum,

9—HOSPITAL TREATMENT for cases of puerperal pyrexia and puerperal fever.

10—HOSPITAL OR MATERNITY HOME ACCOMMODATION for difficult cases of midwifery or for any normal cases wishing to enter an Institution for confinement.

11—APPOINTMENT OF CONSULTANTS for cases of difficult midwifery, or if necessary for puerperal pyrexia and puerperal fever.

12—CENTRES to provide medical and especially hygienic advice, where also treatment of ophthalmic and dental cases should be available.

13—ANTE-NATAL SERVICES including ante-natal clinics, and ante-natal supervision by local practitioners with co-operation of midwives.

14—STERILISED MATERNITY OUTFITS for patients requiring them.

9—Facilities are available for the admission of these cases to either Boston, Peterborough, or Stamford Hospitals.

10—*There is no provision of facilities of this kind.*

11—Consultants have been appointed for puerperal fever and puerperal pyrexia only.

12—Centres have been established at Boston (in conjunction with the Borough), Spalding, Long Sutton and Crowland. There are no arrangements for ophthalmic treatment and dental treatment is confined to a few extractions.

13—*There are at present no facilities for ante-natal work.*

14—These outfits are provided through the Health Department at cost price.

It will thus be seen that the Maternity and Child Welfare Services in this County are most inadequate, and that there is pressing need for their enlargement and improvement. A memorandum of the Ministry shows that a Departmental Committee found that not less than one-half of the maternal deaths were directly preventable under suitable conditions, and the evidence collected from large lying-in hospitals and their associated districts proves that this is so; the maternal mortality rates for these institutions ranged from .68 per 1000 births to 1.9 as against the rate for England and Wales of 4.33 per thousand. For 1929 the maternal mortality rate for Holland was 3.4 per 1000, Kesteven being 2.72 and Lindsey 2.89.

Some branches of maternity and child welfare work are not necessary in a rural area such as Holland, but action should most certainly be taken in the following matters :—

- (a) **Ante-Natal Supervision.** This can be done at ante-natal centres but none of the County Centres is suitably equipped, and even if this could be arranged it is impracticable for the majority of women concerned to attend the Centres. Arrangements should therefore be made with private medical practitioners to undertake the routine ante-natal examination of uninsured women who have engaged midwives for the confinement.
- (b) **Consultants.** The services of a consultant should be made available to medical practitioners in cases of difficult labour, or difficulties or complications arising during pregnancy or at or after confinement. It is not anticipated that these emergencies will arise on many occasions.
- (c) **Hospital Beds.** The urgency of providing beds for complicated cases, or for normal cases in which for some reason the conditions for confinement at home are unsuitable, is great, and it is recommended that arrangements be made for the admission of such cases if necessary to the Institutions, but not by way of relief.
- (d) **District Midwives.** Steps should be taken either directly by the County Council or in conjunction with the Lincs. County Nursing Association to bring about the appointment of District Midwives in those parts where there is no such provision at present, e.g., there is not one midwife in the whole of the County area north of Boston, and in South Holland large areas are still unprovided for.
- (e) **Supply of Milk for Expectant and Nursing Mothers and for Infants.** At the present time dried milk only is distributed at cost or less than cost price to those attending the Centres. The result is that many cannot take advantage of the service, which in itself is inadequate because no provision is made for the mother at the time of confinement and a few weeks afterwards. It is recommended that procedure should be laid down whereby applications for new milk may be dealt with. (This provision is not intended for those cases which come within the province of the Relieving Officer).

The statement which follows gives the estimated cost of improving the service under the various headings afore-mentioned :—

ANTE-NATAL.

There are, in round figures, 1,500 births per annum in the County area. It is certain that during the first year not more than 250 of the total number of expectant mothers will require assistance and avail themselves of the opportunity.

First Ante-natal examination.	The suggested fee is 10/-. 250 at 10/-	£125
Subsequent attendances	It is estimated that not more than 25 per cent. of the original number will need to attend. The fee suggested for this is 5/-. 60 cases at 5/-.....	£15
Specialist Consultation.	It is estimated that not more than 1 per cent. would require this. Fee of £3/3/0 with travelling expenses. 3 cases	£15
Ante-natal hospital cases	It is estimated that not more than 1 per cent. would require hospital treatment. 3 cases for 2 weeks each at £3/3/0 per week	£19
Ambulance.	3 cases at an average of £2 per case	£6
Dental Treatment.	60 cases at £2 a case.....	£120
Extra nourishment.	It is estimated that 5 per cent. of cases require it for 2 months. 75 cases at 30/-	£112

NATAL.

Fees to Doctors.	When called in by midwives (including anaesthetic fees), based on present expenditure	£175
Hospital (or Maternity Home) Accommodation.	It is estimated that 5 per cent. of cases require it on medical grounds—75 cases per annum. Each patient stays 3 weeks	£700
Ambulance.	75 cases at £2 a case.....	£150
Consultant's Fees.	For 2 cases at £5/5/0 a case	£11

POST-NATAL.

Post-natal Consultations.	250 cases at 5/- a case	£60
Extra nourishment.	The same as ante-natal	£112

Puerperal Fever and Puerperal Pyrexia Regulations	The provision of hospital treatment and the services of consultants is available at the present time	£125
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DISTRICT MIDWIVES.

At least 4 additional District Midwives are required. Grant to 4 new Associations (if formed). £50 each per annum	£200
Total	£1945

At the present time the Council is expending approximately £300 per annum on two branches of the service only, namely, "fees to doctors called in by midwives," and in affording facilities for treatment under the Puerperal Fever and Puerperal Pyrexia Regulations.

Hospital Beds. The Committee will have to decide whether it is desirable to have a County Council Maternity Home or Homes, or whether it will be possible to admit any such cases as need special treatment to beds in the Infirmarys (but not by way of relief). There appears to be some difficulty in procuring admission for non-relief cases under present conditions, as the hospital wards are not separate from, but are integral parts of, the 3 institutions.

District Midwives. There are large areas in the County which are not covered by local District Nursing Associations, and in view of the difficulty of obtaining sufficient local support, the only alternatives would appear to be :—

- (1) the employment of whole-time midwives by the County Council where their services are most needed, at a fixed salary, the Council to receive all monies earned by the midwives, or
- (2) the payment of substantial grants to the Lincs. County Nursing Association for that Association to make the necessary local arrangements.

It should be pointed out that if the County Council were to make direct arrangements for the appointment of District Midwives the cost would be much greater than that specified on the previous page.

Supply of Milk to Expectant and Nursing Mothers. Such cases would be referred by either local practitioners, midwives, or Medical Officers of Clinics. The investigation of financial circumstances would devolve on the staff of the Health Department and it could then be decided whether any particular case should be dealt with by the Public Assistance or the Maternity and Child Welfare Committee. It would be necessary for a small Sub-Committee to be appointed to consider applications and to meet at frequent intervals to review the cases authorised.

The essential services to be provided may be summed up as follows :—

- (a) The provision in every case of the services of a qualified midwife to act either as midwife or maternity nurse.
- (b) The provision of a doctor to carry out ante-natal and post-natal examination in every case, and to attend during pregnancy, labour, and the puerperium, as may prove necessary, all cases showing any abnormality.
- (c) The provision of a consultant, when desired by the doctor in attendance, during pregnancy, labour and the puerperium.
- (d) The provision of hospital beds for such cases as need institutional care, and
- (e) The provision of certain ancillary services (e.g., transport, sterilised equipment, laboratory facilities.)

During 1930 the total number of births registered was 1,456, and of these 1,384 were notified to the Health Department.

The following Table shows the number of visits and re-visits paid to infants and children by the Health Visitors during 1929 :—

To children under 1 year—First visits	.....	.....	1625
Re-visits	.....	.....	4645
To children from 1 to 5 years	.....	.....	5978
			<hr/>
Total	.....	.....	12248
			<hr/>

Infant Welfare Centres. No new centres have been opened during the year although one is urgently required for the Holbeach area. At the present time mothers and children wishing to attend a Welfare Centre have to make a journey to Spalding or Long Sutton. I am pleased to record that in 1931 a new centre will be opened on County Council property at Donington. This centre should supply the needs of a large area to the west of Boston.

The work at the centres at Boston, Spalding, Long Sutton and Crowland has progressed satisfactorily during the year, and the attendances of mothers and children have been well maintained.

The attendances at the Welfare Centres during the year were as follows :—

	Spalding	Long Sutton	Crowland
Number of Sessions.....	47	50	25
NEW CASES :			
Mothers	141	27	34
Children under 1 year	127	27	32
Children over 1 year	25	8	2
OLD CASES :			
Mothers	1337	522	402
Children under 1 year	1076	278	230
Children over 1 year	701	367	361
Number of Consultations	538	185	288
Number of Health Talks.....	—	—	1
Ante-natal Attendances	10	5	5

BOSTON WELFARE CENTRE.

Attendance of mothers and babies resident in the County :	
New babies attending Centre.....	105
Attendance of babies with mothers and seen by Medical Officer weekly or monthly as required	727
All other attendances of mothers with babies	898

The work at the County Centres, has, as in past years, been greatly assisted by the labours of the Ladies' Voluntary Committees and I should like to place on record my sincere thanks to these ladies for the good work which they are doing.

Dr. Ashworth reports as follows in connection with her work at the Centres :—

“ There has been no further development in the Maternity and Child Welfare service during 1930. The mothers continue to show great interest in the work, and all attendances have been satisfactory with infants under two years of age. Over that age attendances tend to become irregular (provided the child's progress is straightforward). Unless the advent of a new baby in the family stimulates further interest, in which case the older children also accompany the mother again. Attendance in summer is hampered by the fact that many mothers are at work on the land, and in winter inclement weather and distances from the centres adversely affect the attendances.

It is a matter of regret that nothing has been done towards the establishment of a centre at Holbeach where much valuable work could be done and the Health Visitor greatly assisted in her endeavours to increase interest in mothercraft and child welfare. The distance of the outlying parts of Holbeach from the present centres at Spalding and Long Sutton makes attendances at the centres impracticable for financial reasons.

Ante-natal work on a sound and scientific basis has been impossible owing to lack of proper accommodation."

Children Act, 1908. In accordance with Section 2 of the Local Government Act, 1929, the duties of the supervision of children maintained for reward by foster-parents, which had hitherto been carried out by the Poor Law Authorities, devolved upon the Maternity and Child Welfare Committee of the County Council, for the whole of the County with the exception of the Borough of Boston. For the purpose of this work, the Health Visitors were appointed Infant Protection Visitors under the Act, and the County Medical Officer was designated as the Officer to whom all notices relating to "nurse" children should be sent. On the 1st April, 1930, 28 children under 7 years of age in the charge of 25 foster-parents were transferred as registered cases. In each case a pamphlet was sent out explaining the obligations of foster-parents and periodical visits have been paid by the Infant Protection Visitors, the number of such visits being 135. These reports on "nurse" children have been regularly considered by the Maternity and Child Welfare Committee and steps taken to remedy any unsatisfactory conditions.

The number of children whose names were taken off the Register owing to the fact that they had removed or had attained the age of 7 years was nine ; seven new cases were registered, and the number of children remaining on the register at the end of the year was twenty-six.

Boarded Out Children. The County Health Visitors have, during the year, acted as Visitors for the Public Assistance Committee in connection with boarded-out children and during that time paid 143 visits of inspection.

MENTAL TREATMENT ACT, 1930.

Under this Act mental diseases have been brought into the realm of preventive medicine and provision must be made for the treatment in the early stages of mental disorder. At the same time research work may be undertaken by Councils.

Section 5 of the Act lays it down that the Council must provide in-patient treatment without certification for non-volitional cases, i.e., persons who for the time being are incapable of expressing themselves as willing or unwilling to receive treatment.

Application is to be made by the husband or wife, if possible, or the nearest relative, or by a duly authorised officer of the Local Authority within whose area the patient is, on the request of the husband, or wife, or relative.

The application must be accompanied by two medical certificates on appropriate forms :—

- (a) by the usual medical attendant.
- (b) by a practitioner approved by the Board of Control for this special purpose.

The following gentlemen have been approved for the purpose of giving the second certificate :—

Dr. J. G. Cooper, Westgate House, Sleaford.
 Dr. H. P. Dawson, Oaklands, Dudley Road, Grantham.
 Dr. C. G. Harper, Market Deeping.
 Dr. H. J. Smith, Heckington.
 Dr. W. H. B. Brook, 8, Eastgate, Lincoln.
 Dr. E. A. Bullimore, 12, North Brink, Wisbech.
 Dr. J. W. Mackintosh, 15, Nelson Street, King's Lynn.
 Dr. G. L. Barker, "Cheviot," Wainfleet.

Arrangements have been made by the Council, so that such temporary patients may be admitted to the Bracebridge Mental Hospital, by application through the Health Department at Boston.

Voluntary patients will be admitted to Bracebridge Mental Hospital provided that the whole cost of treatment and maintenance is paid by the patients or their relatives. This type of patient is a volitional case, and makes personal application to be admitted for treatment.

MENTAL DEFICIENCY ACT, 1913 and 1927.

The work of Ascertainment and Classification by the Medical Officer, assisted by Health Visitors, School Attendance Officers, Relieving Officers, School Teachers, etc., etc., has progressed steadily during the year, and the following Table shows how the Defectives in the County are at present dealt with :—

Class.	ADULTS.			CHILDREN.		
	In Institutions	Under Supervision	Total	In Institutions	Under Supervision	Total
Idiots	—	2	2	—	4	4
Imbeciles	4	21	25	4	20	24
Moral Defectives	—	1	1	—	—	—
Feeble-minded	8	32	40	—	2	2
	12	56	68	4	26	30

In addition to the above there are 20 mental defectives receiving Indoor Relief, and a further 34 receiving Outdoor Relief.

VENEREAL DISEASES.

Persons resident in the County and who are suffering from venereal disease can obtain treatment free of charge at clinics at Lincoln, Peterborough, and King's Lynn. Particulars of times at which clinics are held are given on page 17.

Wassermann reactions were made for general practitioners to the number of seventeen (17) and railway fares amounting to £149/2/7 were refunded to patients who were unable to bear the cost.

Arseno-benzol compounds have been supplied free of cost to one general practitioner.

Abstract relating to persons treated at the Venereal Diseases Treatment Centres.

	Lincoln	Peterboro'	Lynn
A. Number of persons dealt with for the first time and found to be suffering from—			
Syphilis	8	6	5
Soft Chancre	—	—	—
Gonorrhœa	10	22	5
Conditions other than venereal	4	7	4
Total	22	35	14
B. Attendances of all patients.....	459	1547	234
C. Aggregate in-patient days.....	—	—	—
D. Number of Doses of arseno-benzol			
substitutes	150	114	140
Out-patients ..	—	—	—
In-patients ..	—	—	—

The figures in the foregoing table by no means represent the total number of cases of venereal diseases occurring in the County, as a certain number of patients receive treatment from medical practitioners.

The following table gives the main statistics in connection with venereal diseases since the commencement of the scheme.

Year	Syphilis	Soft Chancre	Gonorrhœa	Total Venereal Diseases	Diseases other than Venereal	Total New Cases	Total Attendances
1924	11	1	6	18	4	22	282
1925	11	1	24	36	14	50	1060
1926	8	Nil	23	31	7	38	1032
1927	10	Nil	13	23	6	29	1033
1928	7	Nil	22	29	6	35	1236
1929	13	Nil	29	42	3	45	1462
1930	19	Nil	37	56	15	71	2240

An examination of the figures in the preceding Table shows very definitely that during the past three years there has been a steady increase in the incidence of venereal diseases in the County. In view of this I submit that the time has come when the Council should undertake an intensive campaign against these diseases by means of press articles and public lectures, etc.

Venereal Disease Act, 1917. No action taken.

APPENDIX 1.

**ENQUIRY INTO INCIDENCE OF TUBERCULOSIS IN THE
BOROUGH OF BOSTON FOR THE YEARS 1928,
1929 and 1930.**

Whilst for many years the death rate from Tubercular Disease in the County of Holland has shown a fall in the same proportion as for England and Wales, the figures for the Borough of Boston (whose Tuberculosis Service is administered by the Holland County Council Public Health Department) have not reflected this general fall; indeed, at the present time, statistics show that the death rate from Tuberculosis in the Borough of Boston is nearly double that of the County.

The following Table shows the death rates from all forms of Tuberculosis for the County of Holland, the Borough of Boston, and England and Wales, per 1,000 of the population, for the years 1928, 1929, and 1930 :—

TABLE SHOWING DEATH RATE FROM TUBERCULOSIS
(ALL FORMS).

Year.	England and Wales.	County of Holland.	Borough of Boston.
1928 .....	.93	.71	1.3
1929 .....	.96	.67	1.3
1930	—	.81	1.3

Comparative figures for the County, the Borough of Boston, and various towns for the year 1929 are here shown :—

Area.	Population	No. of Deaths from Tuberculosis (all forms)	Death Rate per 1,000 of population
Holland (Lincs.)	89,400	60	.67
Boston Borough	15,880	22	1.3
Peterborough M.B.	41,800	27	.64
Fleetwood U.D.	21,990	14	.64
Gainsborough U.D.	18,740	12	.64
Scunthorpe & Frodingham	31,880	29	.91
Lincoln C.B.	65,250	62	.95
Cleethorpes U.D.	28,680	28	.98
King's Lynn M.B.	20,160	23	1.14
Grimsby C.B.	91,440	116	1.27
Grantham M.B.	18,900	24	1.27
Bristol City	391,000	473	1.21

In an endeavour to ascertain whether there is any apparent reason why the death rate from Tuberculosis should be so markedly higher in the Borough of Boston than it is in the rest of the County, an enquiry into the conditions of the homes from which cases of Tuberculosis have been notified, has been undertaken for the three years under consideration.

In the year 1928, 51 cases of all forms of Tuberculosis were notified in the Borough of Boston. In 1929, 37. In 1930, 41. These homes are visited by one of the County Council's Health Visitors, unless a notification is received from the patient's doctor that this is not desired. The Health Visitor fills in a card regarding the accommodation and sanitary conditions of the home. The following is a summary of these visits for 1928, 1929, and 1930.

Year.	No. of cases notified.	No. of homes visited.	No. of patients having a bedroom of their own.
1928	51	42	13
1929	37	22	7
1930	41	20	11

In 1928, 4 cases were notified from one household and 2 from another ; in 1929 not more than one case was notified from any given household, and in 1930 two in one family were notified.

From the above Table it will be seen that in 1928, of 42 homes visited, only in 13 cases (or 39%) was the patient found to have a bedroom of their own. In the remaining 61% one or more members of the family were sharing a bedroom with the patient. In 1929, 7 (or 32%). In 1930, 11 (or 55%). Of the remaining cases visited during these years, 23 share a bedroom with one other person. Of the remaining 30 patients from 3 up to 7 people were found to be sharing the bedroom accommodation.

The 129 cases notified during these years were distributed among 70 different streets. From one street 7 cases were notified, 5 cases were notified from each of three streets, 4 cases were notified in two other streets, from 9 other streets 3 cases at least were notified. Fifteen streets had two cases of Tuberculosis. The remaining cases were the only one in their particular street.

In the main, the streets in which the larger number of cases arise were found to be those where bad housing conditions and overcrowding were most in evidence.

An average of 43 new cases per annum from any one disease may not seem particularly striking unless the size of the population is taken into consideration. The estimated population for the Borough of Boston for 1929 was 15,880. If the City of Bristol population (391,000) were similarly affected, one would expect 1,059 cases to be notified, but notifications of all forms of Tuberculosis for the City of Bristol in 1929 amounted to only 719.

APPENDIX 2.

REPORT ON ISOLATION HOSPITAL ACCOMMODATION IN HOLLAND.

The Isolation Hospital accommodation is provided by two joint hospital districts and by one Urban District.

- (1) In the north of the County a Joint Hospital District includes the Boston Urban and Rural Districts and Sibsey Rural District (Lindsey), and serves a population of 42,848. The Hospital is an adapted farm house and stands in grounds of nearly two acres in extent, about half-a-mile from the outskirts of Boston.

It contains four wards with seventeen beds.

A steam disinfecter is installed and patients are brought to the Hospital in a motor ambulance.

The Boston Water Supply is laid on and sewage is disposed of to a cesspool on the estate.

No permanent trained nursing staff is provided.

Adjoining this Hospital are the small-pox hospital (2 wards with 8 beds) and the Port Sanitary Hospital (2 wards with 8 beds) both modern brick and slate buildings. The former building is only about 30 yards from the other buildings.

- (2) In the south of the County a Joint Hospital District includes Holbeach, Long Sutton, and Sutton Bridge Urban and East Elloe Rural Districts, serving a population of 21,460.

The Hospital is situated at Fleet, near Holbeach, and is a permanent structure of brick and slate, containing 2 wards (8 beds and 2 cots) with accommodation for nurse and caretaker.

The water supply is from the rainfall and subsoil water, and sewage is disposed of to a "dry well."

There is no steam disinfecter.

A horse ambulance is used to convey patients to the Hospital.

- (3) Spalding Urban District Isolation Hospital is a wood and zinc pavilion providing accommodation for 8 cases and also a nurse and caretaker.

The water supply is from the rainfall and sewage is disposed of on the land.

A horse ambulance is used for the conveyance of patients.

There is no steam disinfecter.

The Hospital is used when required for the isolation of cases of small-pox.

- (4) The Wisbech Port Sanitary Authority has a small brick and slate Hospital at Wingland containing 4 beds together with a caretaker's house.

The remaining Sanitary Authorities arrange for the isolation of cases of infectious diseases in the Hospitals of other Authorities as follows :—

- (1) The Spalding Rural District Council contracts to send cases (including small-pox) to the Bourne Isolation Hospital. This Council pays an annual sum of £150 in payment for patients up to the number of 12.

Any patients over and above this number are paid for at the rate of £2/10/0 per week and then only if accommodation is available.

- (2) The Crowland District Council has arranged to send cases of infectious diseases (including small-pox) to the Peterborough City Fever Hospital.

As far as the Hospitals at Spalding and Fleet are concerned it is very unwise to attempt to isolate more than one type of disease at a time, with the result that when epidemics of small-pox, etc., occur, cases of other diseases at that time in these Hospitals would have to be sent to their homes in order to provide accommodation for the small-pox cases. This should be borne in mind when considering the question of hospital accommodation in the County

The following Table shows the average number of cases of scarlet fever and diphtheria notified in the various districts from 1922—1927 inclusive :—

	Scarlet Fever.	Diphtheria.
Spalding Urban District	13	28
Holbeach Urban District	4	Nil
Long Sutton Urban District	less than 1	1
Sutton Bridge Urban District	1	1
East Elloe Rural District	10	5
Spalding Rural District	19	9
Crowland Rural District	8	7

The accommodation provided in the north of the County is fairly satisfactory (including small-pox), although in my opinion there are not enough beds available for general infectious diseases. There should be 30 beds, i.e., 13 more than are at present available. At all events in this area it is quite possible safely to isolate small-pox without discharging cases of other diseases as was shown during the recent epidemic of small-pox in Boston (1928).

In the south of the County, however, the matter takes on quite a different aspect.

In Spalding, Holbeach, Long Sutton, and Sutton Bridge Urban Districts and in East Elloe Rural Districts, there is no adequate accommodation for cases of small-pox and by this I mean no other infectious diseases can be dealt with when small-pox is epidemic. Even when there are no cases of small-pox only one type of disease can be dealt with at a time. That this is very unsatisfactory was recently demonstrated during the recent outbreak of small-pox at Spalding.

In a district such as South Holland there should be available for general infectious diseases (more especially scarlet fever, diphtheria and enteric fever) at least 32 beds. The isolation of small-pox is, of course, a separate matter.

The number of beds required depends on several factors amongst which may be mentioned the previous history of epidemics in the area, density of population and overcrowding. In most districts, where provision as a rule need only be made for scarlet fever, diphtheria and enteric fever, the number of beds need not be so great as for the same population concentrated on a small area. Where overcrowding exists (as it does in many parts of the County) home isolation of infectious diseases is an impossibility. So that whilst 1 bed per 1,000 of the population would be too many for this area, I am of opinion that 1 bed per 1,500 is required and the figure (32) previously mentioned is calculated on this basis.

The existing deficiencies in Isolation Hospital accommodation can be met as follows :—

- (a) By increasing the accommodation at the Boston Isolation Hospital* by at least 12 beds so that this Hospital could serve adequately the requirements of the north of the County, and in the south of the County by erecting a Hospital at Spalding for the accommodation of cases of scarlet fever, diphtheria and typhoid fever. A pavilion could also be included here for a certain number of cases of advanced tuberculosis.

The present Hospital at Fleet could then be utilised for the accommodation of cases of small-pox. The provision of a motor ambulance would of course be necessary.

- (b) By erecting one Hospital in a central situation to serve the whole County. Provision at the Hospital in the form of small pavilions could be made for the reception of advanced cases of tuberculosis, so that the Nursing Staff would be fully occupied during the times when infectious diseases were not epidemic in the area. Such an institution would provide accommodation for all cases of infectious disease from all parts of the County and at the same time would permit of the closing down of the present institution for the accommodation of advanced cases of tuberculosis, viz., Holland Sanatorium.

(This would be the ideal method, but unfortunately the lack of a piped water supply in the greater part of the area limits the number of suitable sites to such an extent that the provision of a really centrally situated Hospital becomes a problem very difficult of solution).

H. C. JENNINGS,
County Medical Officer of Health,

County Hall, Boston,
October, 1928.

* The Authorities of this Hospital are incurring a grave responsibility in failing to provide a *permanent* trained Nursing Staff.

APPENDIX 3.

ISOLATION HOSPITAL ACCOMMODATION.

The report on Isolation Hospital accommodation which was presented to the Health Committee on 9th October, 1928, gave two alternatives for adequate isolation hospital accommodation in this County :—

- (a) a centrally placed Hospital to serve the whole County, or
(b) 2 Hospitals, one at Boston and one at Spalding.

Since that report was submitted the Joint Hospital Board for the north of the County has approved plans for extensions of, and additions to the present isolation hospital at Boston, as a result of which all infectious diseases except small-pox will be adequately catered for.

The question of the provision of a Hospital at Spalding for the south of the County was referred to the Authorities in the south of the County for their opinion, and the replies show that the Holbeach and Long Sutton Urban, and the East Elloe Rural District Councils consider that the present accommodation at Fleet is sufficient. (Sutton Bridge Urban District Council, the other Constituent Authority of the Joint Hospital Board, gave no reply). The Spalding Urban and Rural District Councils and the Crowland Rural District Council all approved the erection of an Isolation Hospital at Spalding to serve all the Local Authorities of South Holland.

In my opinion the Isolation Hospital accommodation for the south of the County is quite inadequate, and the erection of an Isolation Hospital at Spalding is the only means of solving the problem.

For the information of the Committee I would point out that, under Section 63 of the Local Government Act, 1929, the County Council must make a survey of the hospital accommodation for the treatment of infectious diseases provided by the Council and by the Councils of any District wholly or partly within the County, and after completion of the survey shall prepare, in consultation with the Councils of all Districts, and submit to the Minister a scheme for the provision of adequate isolation hospital accommodation for the treatment of infectious disease in the County.

I submit, therefore, that in order to carry out their statutory duties, the County Council should forward to the Minister the scheme prepared by me, the principle of which has been rejected by three of the Local Authorities. Further, I would suggest that the Minister be informed of the need for the matter to be dealt with at an early date, as the building of the new hospital at Boston means that there will be no accommodation for the isolation of small-pox in the north of the County.

The following are the proposals I place before the Committee for the provision of Isolation Hospital accommodation in the south of the County :—

The erection of an Isolation Hospital at Spalding (because of the availability of the usual public services) to comprise :—

- (1) a pavilion for scarlet fever cases.
- (2) a pavilion for diphtheria cases.
- (3) a pavilion consisting of cubicles for the observation and treatment of typhoid fever, sleeping sickness, pneumonia, etc., etc.
- (4) a disinfecter.
- (5) a laundry.
- (6) boiler house.
- (7) garage.
- (8) mortuary.
- (9) porter's lodge.

The present Isolation Hospital at Spalding would then become disused, and the Isolation Hospital at Fleet could, with certain modifications, be available for the isolation and treatment of cases of small-pox for the whole County.

H. C. JENNINGS,
County Medical Officer.

March, 1931.

